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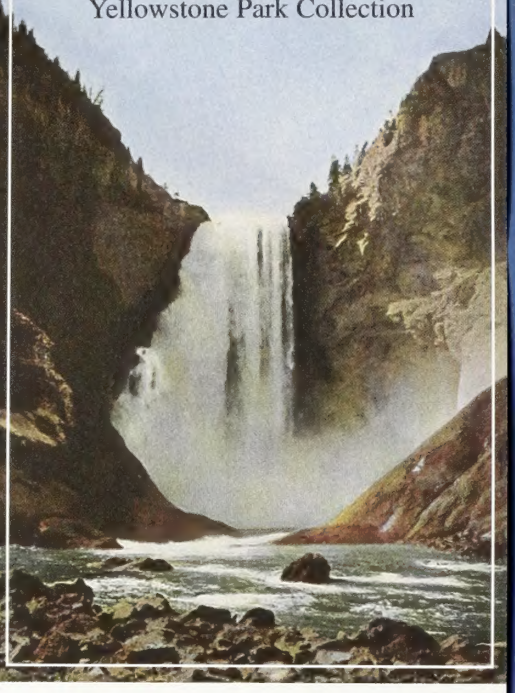
FORT YELLOWSTONE

HISTORIC STRUCTURE REPORT



MAY 1972

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YELLOWSTONE NATIONAL PARK

FORT YELLOWSTONE

HISTORIC STRUCTURE REPORT

by

DAVID G. BATTLE
and
ERWIN N. THOMPSON

HISTORIC PRESERVATION
DENVER SERVICE CENTER
MAY 1972



UNITED STATES
DEPARTMENT OF THE INTERIOR
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ABSTRACT

This historic structure report on Fort Yellowstone and other structures in the vicinity was prepared to fullfill the requirements of Resource Study Proposals, YELL-H-4a and 4b. It contains both the historical and the architectural data sections.

The historical data section contains a brief history of construction at Mammoth Hot Springs, including Superintendent Norris' headquarters, Camp Sheridan, and Fort Yellowstone. Following that are brief histories of every military or military-associated structure, standing or demolished. The section concludes with an outline of some of the historical highlights and personalities of the post. The time span covered is 1878 to 1918.

The architectural data section contains an architectural description of the complex, a description of existing conditions, and proposed construction activities. Each structure is then treated along the same themes in individual detail.

The report contains a bibliography, maps, illustrations, and photographs.

ACKNOWLEDGMENTS

As always, the people at the National Archives were most helpful in guiding us to the pertinent records on Fort Yellowstone. Thanks go to Mr. Elmer Parker, Mrs. Elaine Evelery, Mr. James D. Walker, Mr. Garry Morgan, and many other members of the staff.

A sincere appreciation goes to all the Yellowstone National Park staff who helped endlessly in the preparation of this report. Mr. Aubrey L. Haines, Bozeman, Mont., formerly park historian at Yellowstone, deserves special thanks not only for his own research on the fort but for first introducing us to the Yellowstone Archives. Mr. Frank L. Greene, Librarian, Washington State Historical Society, Tacoma, was most helpful in response to our questions on General Chittenden. Thanks go to Mrs. Beatrice B. Libys and Jennifer Hunt Watts who typed this report.

D. G. B.
E. N. T.

1. Administrative Section

A. The Project

The project involves the restoration and preservation of the historic district at Mammoth Hot Springs, particularly Fort Yellowstone (1891-1916) and the surrounding landscape. It includes the restoration of the exteriors of the fort structures to their original appearance, and allows for the adaptation of their interiors so that they may continue in their present-day or future uses as park administrative facilities and residences. The project will result in the preservation of the general historic scene of this imposing army post. The historic district, including Fort Yellowstone and associated historic structures is classified as being of the second order of significance in accordance with the administrative policies for historical areas.

B. Proposed Treatment

The amount of work required on the structures varies from building to building. Basically, this work consists of general maintenance and repair, minor reconstruction of various elements, some reroofing, repainting to historic colors, and some preventive measures to forestall future deterioration.

Restoration of the general complex should include the parade ground, flagstaff, the sunset gun on Capitol Hill, and some historic structures not directly associated with Fort Yellowstone, i.e., the U.S. Commissioner's building and the entrance arch at Gardiner. The report also contains a section on the proposed treatment of a historic bridge over the Firehole River.

Further restoration of the historic scene will involve continuing development and usage of the Mammoth Headquarters area. This will be accomplished through the use of a long-range program providing for the eventual elimination of certain structures, changes in land and building uses, and provision for future construction and uses compatible with and not intruding upon the historic scene.

C. Management and Proposed Use

The historic district will be so managed as to preserve the historic appearance of the structures (exteriors) and grounds in such a manner as to allow for adaptive uses of the interiors. An interpretive program will assist the visitor to gain an appreciation of this impressive army post and its outstanding architecture.

The present and proposed uses of the several structures vary from building to building and are discussed within the report. In essence, they will house the park administrative facilities and serve as residences for park staff.

2. Historical Data Section

A. A Brief History of Construction

1. Superintendent Norris' Headquarters

Philetus W. Norris, appointed the second superintendent of Yellowstone in 1878, chose Mammoth Hot Springs as his headquarters in June 1879. James C. McCartney had already established a rude hostelry of several log structures at the foot of the Hot Springs terraces. Norris selected a site on "McCartney Creek," probably today's Clematis Creek, for a temporary building. His crew of 30 men quickly threw up a "rough log building" that was used for storage and cooking. Their temporary housing was even less substantial: "In canvas wagon-cover wings to our house, several tents, and a lodge, we made ourselves as comfortable as possible during the remainder of the stormiest June which I ever experienced in the Rocky Mountains."

Nez Perce Indians had raided McCartney's place only two years earlier. This incident probably caused Norris to think in defensive terms as he planned his permanent headquarters. He decided to erect a blockhouse on a small hill just east of the terraces, today called Capitol Hill, from where he had an excellent view of both the Hot Springs and Gardiner Canyon. He reported that the hill was "a sage-brush dotted, grassy mound, having a few dwarf firs and cedars upon it, and with a regular supply of cold water in a natural depression for a reservoir near the house." This depression, between the hill and the terraces, would later be used by the Army for the same purpose. For Norris, however, it meant the tiresome chore of hauling water up the hill to the blockhouse.

Using timber from the area and hardware hauled up from Bozeman, the carpenters rushed the unique park headquarters toward completion. Topping the two-story, 40 by 18-foot, log building was a 10-foot high, octagonal "turret or gun-room."

Large lean-tos surrounded the house on three sides and a 53-foot flagstaff rose splendidly through the center of the house and the turret.

Toward the western foot of the hill, Norris erected a 32 by 18-foot barn. Next to it he built a "large and substantial" corral. A hen house was located in the hillside near the barn. But Norris sadly noted that skunks killed his chickens with depressing regularity. Close to his reservoir, the superintendent erected a small blacksmith shop. Other structures included a bathouse and a "commodious" toilet.[1]

One of Norris' successors, Patrick H. Conger, was quite unhappy about the blockhouse. Besides having to lug water up the hill, he complained that the house was "nothing but a log cabin at best, sadly out of repair, roof leaky, and the force of the winds shakes the plaster out of the cracks between the logs, rendering the house hardly habitable." Conger asked for the authority to replace it with a new headquarters, but the Secretary of the Interior disapproved his request.[2]

Capt. Moses Harris, 1st Cavalry, became Acting Superintendent of Yellowstone on August 17, 1886. His troop established Camp Sheridan at the western foot of Capitol Hill, within shouting distance of Norris' blockhouse. During the next 24 years an occasional reference to the building appeared in the Army records. From time to time, a married enlisted man or a civilian enployee would be allowed to use the old structure as a residence. But the post quartermaster rarely spent any money in keeping it in repair. Mrs. Marguerite Lindsley Arnold, who grew up in the park, recalled in later years that she used to play in the old house when still a small girl.

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1. P. W. Norris, Report Upon the Yellowstone National Park to the Secretary of the Interior (for 1879)(Washington, 1880), pp. 3-5; and Fifth Annual Report of the Superintendent of the Yellowstone National Park (for 1880) (Washington, 1881), pp. 24-25.

2. P. H. Conger, Annual Report of the Superintendent of the Yellowstone National Park . . . 1883 (Washington, 1883), p. 5.

In its last years, the blockhouse was considered to be uninhabitable. A visitor to the park at that time climbed the hill and saw the "dirty and dreary" building. Maj. Henry Allen, in 1908, said that it was in a very bad state of repair and "is not occupied nor used for any purpose, and has not been for some years except for a few months at a time occasionally in emergencies by a teamster or married soldier." Finally, in 1910, Maj. Harry C. Benson had the 31-year-old building torn down. A year later the logs were still lying on Capitol Hill. Benson's replacement, Col. L. M. Brett, requested permission to sell the "squared logs, which are only partly sound." He thought he could get $25 for them.

Mrs. Arnold later wrote that the blockhouse's "hickory mantel /sic/ piece with two of the windows were salvaged and placed in the house now /ca. 1934/ occupied by Mr. Claud Moore." Her father, Chester A. Lindsley, who was the Interior Department clerk at Fort Yellowstone when the building was dismantled, thought that its destruction was an error. He thought that its historical significance as the first office and residence built for a national park superintendent justified its retention.[3]

Even when the blockhouse was still standing, the Army opened a gravel pit near the top of Capitol Hill and removed a considerable amount of gravel for improving the roads at and near Mammoth Hot Springs. It is possible too that after the structure was dismantled, more gravel was removed from its former site. There is little or no trace of the blockhouse today. An excavation thought to be a cellar may be seen.

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3. Marguerite Lindsley Arnold, "Early Impressions," Yellowstone Nature Notes, March-April 1934, p. 15; Chester A. Lindsley, "The Chronology of Yellowstone National Park, 1806 to 1939," typescript, Yellowstone Library, pp. 83 and 201; Yellowstone Archives, Letters Sent, 18, 1907-08, H. Allen, May 18, 1908, to Sect. of the Interior; Yell. Archives, 104, Actg. Supt., Apr. 4, 1911, to Sect. of War. Rube Shuffle, Yellowstone Letters (New York, 1906), p. 36. Mrs. Arnold recalled that the blockhouse was torn down in 1909. But Colonel Brett's letter of Apr. 4, 1911 (above) said that it had been torn down "last summer," i.e. 1910. According to Lindsley, Mr. Eivind Scoyen, later an Assistant Director of the National Park Service, was born in the Norris blockhouse.

A few large rocks lying on the hilltop might be a vestige of the rock used by Norris either to anchor his flagstaff or as footings for the building. But such must be conjecture. Aubrey L. Haines has written that the stub of the flagstaff is still underground. Norris' barn was still standing in 1908. At that time Chester Lindsley was keeping his horse in the building and storing some of his household goods there.[4]

2. Camp Sheridan, 1886-91

Troop M, 1st Cavalry, had three officers, one assistant surgeon, thirty enlisted men, and three civilians attached when it arrived at Mammoth on August 17, 1886. One of Capt. Moses Harris' first responsibilities was to have quarters erected before the advent of winter. By September, he had on the payroll 17 civilian carpenters and a 10-man sawmill crew. They quickly threw up a barracks and officers quarters. Other structures followed. Until Fort Yellowstone was built in 1891, Camp Sheridan, which the Army considered to be only a temporary post, sheltered one troop of cavalry. Starting in 1888, a second company came into the park each summer, but camped in Lower Geyser Basin and elsewhere.

Harris and his successors at Camp Sheridan (Capt. F. A. Boutelle and Capt. George S. Anderson) each wore three hats: commanding officer of the troop, commanding officer of the post, and acting superintendent of the park. At that time, construction at Army installations was a responsibility of the Quartermaster General. Probably because Camp Sheridan was a small and temporary post, no construction quartermaster was assigned to it. Harris himself supervised the work.[5]

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4. Yell. Archives, Letters Sent, 16, H. Allen, May 18, 1908, to Sect. of the Interior.

5. From the establishment of Camp Sheridan until it was replaced by Fort Yellowstone in 1891, the temporary post had three commanders and three troops of cavalry:

Aug. 1886 - May 1889, Capt. Moses Harris; Troop M, 1st Cavalry.
May 1889 - Dec. 1890, Capt. Frazier A. Boutelle; Troop K, 1st Cavalry.
Feb. 1891 - Apr. 1891, Capt. George S. Anderson, Toop I, 6th Cavlary.

In January 1891, only one officer and seven enlisted men were present for duty. For two weeks, 1st Lt. John McMartin, 25th Infantry, was sent to the park from Fort Missoula on temporary duty to act as CO and acting superintendent of the park. He was the only infantryman to act in those capacities at Yellowstone.

But his construction money could come only from the Quartermaster General. The latter was not generous to the captain. At first, Harris had to establish his office in Norris' old blacksmith shop, which the captain thought to be of a "mean and squalid character." He felt it "humiliating" to be running the business of the park from such a structure. Finally, the Quartermaster General relented and provided $500 for additional buildings.

From the monthly post returns one obtains a glimpse of construction activities. September 1886: "The erection of shelter, for troops during the winter, was commenced September 25th, 1886." November 1886: "The troops moved into barracks on the 10th inst." June 1887: "The construction of the Office Building at the post was commenced on the 13th inst. And work for the completion of the Provisonary Hospital on the 18th inst. Both buildings were completed on the 30th inst." The speed of the construction gives a good indication of the simplicity of the frame structures.

Two early maps, dated 1889 and 1894, show from 14 to 16 buildings at the camp. The 1889 map identifies the structures as follows: 1. Hospital. 2. Officers Quarters. 3. Office. 4. Barracks. 5. Storehouse. 6. Guard House. 7. Cavalry Stable. 8. Quartermaster Stable. 9. Shed. 10. Magazine. 11. Amusement Room (Day Room). 12, 13, and 14. Shops. While not all the structures were numbered on the 1894 map, the numbers on this latter are important for they represent the Army's official designation, which remained unchanged until the troops left Yellowstone. They are: 1. Barracks. 2. Warehouse. 3. Guard House. 4. Troop Stable. 5. Quartermaster Stable. 6. Hospital. 7. Office. 8. Officers Quarters. 9. Magazine. The "shops" are shown but not numbered nor named. All the structures but one were frame, the exception being the stone magazine.

Camp Sheridan did not die when Fort Yellowstone was founded in 1891. Its structures continued to serve in a variety of functions for many years. In 1892, the permanent complement of Fort Yellowstone was doubled to two troops of cavalry. Until additional quarters were built in 1897, the old buildings at Camp Sheridan housed the second troop each winter. Also, the War Department authorized the U.S. Engineer Officer in the park to make use of some of the structures

(Warehouse, Guard House, Quartermaster Stable, and Office) until the Engineer got his own buildings erected in 1902-03. Still later, the complex was taken by the post commander who established the pack train there. By 1905 a corral had been built around part of the site and the old post was known as the "Old Quartermaster Dept. Buildings."

A 1912 army inventory of structures showed the functions of some of the buildings as of then:

Original function	1912 function
1. Barracks	Storehouse
2. Warehouse	Storehouse
3. Guard House	Packers Quarters
4. Troop Stable	Pack Train Stable
5. Quartermaster Stable	Quartermaster Stable
7. Office	Blacksmith Quarters
8. Officers Quarters	Quarters for Wheelwright and Plumber
9. Magazine	Magazine

This inventory also mentioned an additional set of enlisted mens quarters, number 14. No other reference to a structure at the old post having that number has yet been found.

Camp Sheridan underwent a drastic change in 1915, one year before the Army left the park. Lt. Col. L. M. Brett wrote in his annual report: "The military authorities have torn down and destroyed the old barracks and stables originally known as Camp Sheridan, located close to the road opposite Juniper Terrace, thereby greatly improving the appearance of the landscape at that point."

Brett was correct about the improvement to the natural scene. All the buildings, those torn down and those still standing, had not been much to start with and had become dilapidated over the years. In hindsight, they had been located much too close to the terraces of Mammoth Hot Springs. They have left little trace. The first post from which the Army administered a national park is to be found now only in words and pictures.[6]

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6. National Archives, hereinafter cited as NA, Microcopy M 617, Camp Sheridan, Post Returns, August 1886-April 1891; Yell. Archives, Letters Received, 3, Aug. 1898-Jan. 1901, H. M. Chittenden, Mar. 19,

3. Fort Yellowstone, 1891-97

In February 1890, the Secretary of War submitted to Congress an estimate of $50,000 for construction of a permanent post at Yellowstone. That fall, the Acting Secretary of the Interior wrote Capt. Frazier Boutelle asking for a detailed report on the site proposed for the fort. He warned Boutelle not to start construction until Interior had given its approval of the location. Boutelle's sudden and unexpected transfer in December removed him from the scene before final approval had been given.[7]

Before Capt. George Anderson arrived to take over the park in February 1891, the Department of Dakota recommended the proposed site to the Adjutant General. The Department reported that "the tract should . . . be somewhat larger than that merely required for placing the buildings near each other in regular order, owing to the fact that hollow spaces exist in places below the crust deposits . . . and it may . . . be necessary to scatter the buildings somewhat." Also, while present plans were for only a one-troop post, the possibility of a future increase in strength should be considered.

The Department described the site, which had been selected by Boutelle and the chief quartermaster of the Department, as follows: Beginning at a point 1,130 feet south 33 degrees 45 minutes east of the northeast corner of the foundation of the Mammoth Hot Springs Hotel, thence south 87 degrees 50 minutes west 75 feet; thence north 2 degrees 10 minutes west 1090 feet thence north 87 degrees 50 minutes east 900 feet; thence south 87 degrees 50 minutes west 825 feet to the place of beginning. The area contained about 22½ acres.

1900, to Capt. O. J. Brown; Yell. Archives, No. 167, "Early Pictures, Government Buildings, 1886 to 1912;" Yell. Archives, Lt. Col. L. M. Brett, "Annual Report," Sept. 30, 1915; Aubrey L. Haines, "The Yellowstone Story," MSS, Ch. 16, p. 2; and H. Duane Hampton, "The Army and the National Parks," Forest History, 10 (Oct. 1966), 12.

7. Yell. Archives, Letters from Interior, 2, Actg. Sect. Gro. Chandler, Oct. 23, 1890, to Capt. F. A. Boutelle.

In addition, the Department of Dakota asked for Interior's permission to dam Clematis Creek and to run pipes underground for a water supply system; for such control of the creek as would be necessary to prevent its pollution; and to use lumber, logs, rock, limestone, sand, etc., from the park for construction purposes. This request ran its course "through channels" and, on February 27, the Secretary of the Interior sent the Secretary of War his approval of all the requests.[8]

In the midst of all this routing of correspondence, Captain Anderson had one of his officers, 1st Lt. George H. Sands, make a report on the site. Sands had some trouble investigating because the area was covered with snow. Also, a member of the United States Geological Survey advised against the site, since it was located on an old formation of the hot springs, which was perhaps not stable enough to support heavy buildings. But Sands was not shaken by this advice: "I consider it a proper place for permanent military quarters. They should certainly be in the immediate vicinity."[9]

First Lt. Carroll A. Devol, 25th Infantry, arrived at Mammoth in April 1891 to supervise the construction, which was to be done by civilians under contract.[10] Captain Anderson used the new name, Fort Yellowstone, on his post return for May. Troop I, 6th Cavalry, and the officers moved into the new buildings in November. These buildings consisted of: two double sets of officers quarters, a troop barracks, a guard house, an administrative building (post and park headquarters), a commissary storehouse (with office), a

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8. Yell. Archives: Letters from Interior, 2: Brig. Gen. Thomas H. Ruger, Dept. of Dakota, Jan. 16, 1891, to the AG; Div. of the Missouri, Jan. 19, 1891, to the AG; Sect. of the Interior Noble, Feb. 5, 1891, to Theo. B. Casey; Senator Casey, Feb. 10, 1891, to Sect. of the Interior; Sect. of the Interior Noble, Feb. 27, 1891, to Sect. of War; and Asst. Sect. of Interior Gro. Chandler, Feb. 28, 1891, to Capt. George Anderson.

9. Yell. Archives, Letters Sent, 3, 1st Lt. G. H. Sands, Feb. 16, 1891, to the Sect. of the Interior. Sands hedged a bit. He also recommended two alternatives: the existing Camp Sheridan, and on the plateau near the northern foot of Capitol Hill. Either of these would have placed the fort close to the terraces, and the latter would have cluttered the plateau itself.

10. The principal contract in 1891, $57,462, was won by J. H. Donohue and J. H. Hoffman. See NA, Record Group 92, OQMG, Consolidated File, Ft. Yellowstone, Box 1269.

quartermaster storehouse (with office), a granary, a bakery a set of cavalry stables, two sets of quarters for noncommissioned officers on the headquarters staff, and a root house. Each set of quarters got its own dry-earth closet, i.e. toilet, in 1891, and the barracks got a modest sewage system in 1892. Fuel sheds for each of these were erected in 1893. An iron flagstaff stood in front of the row formed by the officers quarters, post headquarters, and guard house.

During the next six years, when the fort remained a one-troop post, several more buildings were added: a hay shed and a shop building (both in 1893), a hospital and a hospital steward's quarters (1894), and a building called a "forage storehouse." In 1895, nearly a mile of board sidewalks was laid between the various buildings of the post. All the structures were frame and collectively they presented an attractive, tidy establishment. Together, and including the water and sewage systems, they cost the government approximately $85,000.[11]

Even while this first period of construction was underway, Anderson had plans for a two-troop post. He hoped that the necessary appropriations would become available in 1892:

> The new post, on the plateau facing the Mammoth Hot Springs Hotel, was occupied last autumn after the close of the season. A system of water supply and sewerage has just been completed, and small works of improvement are constantly going forward. The post makes a rightly and attractive addition to the place. Another company in garrison is much needed. The single cavalry troop here is kept constantly

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11. Haines, Ch. 16, p. 1; NA, RG 92, OQMG, Consolidated File, List of Structures, Ft. Yellowstone, Sept. 1, 1896 (Sept. has been struck out and Dec. added in pencil); George S. Anderson, "Work of the Cavalry in Protecting the Yellowstone National Park," Journal of the United States Cavalry Association, 10 (March 1897), 5; Yellowstone Library, Scrapbook no. 4208, unidentified clipping, "The Talk of the Town." First Lt. Carroll A. Devol had been regimental quartermaster for the 25th Infantry. Later in his career he would be assigned to the Quartermaster Branch. He was the son of Civil War Bvt. Brig. Gen. H. F. Devol, then living in Washington, D. C.

> occupied with its patrol work. A company of infantry should be added, from which details could be made to watch the "formations" and occupy the outposts in winter with snowshoe parties.
>
> I asked of the War Department an allotment sufficient to add accommodation for another company, and it was disapproved on the ground that there was not money enough available.[12]

The size of the permanent garrison did double with the arrival of Troop D, 1st Cavalry, from Fort McKinney in May 1892. For the next five years, until the second barracks was constructed in 1897, one troop lived in the new post while the other spent the summers at Lower Geyser Basin (with detachments elsewhere) and the winters in the old barracks at Camp Sheridan.

First Lt. Hiram M. Chittenden, Corps of Engineers, first arrived in the park in June 1891. He was responsible for the development of roads and bridges within the park, a responsibility that the Engineers had had even before the Army took over the administration of the park. Chittenden spent two seasons, 1891 and 1892, on this assignment in the park. In his role he operated much more independently of the acting superintendent than did the construction quartermaster. Like all engineers he was authorized to communicate directly with the Office of the Chief Engineer. Furthermore, his appropriations came from that office rather than from the post commander/acting superintendent.

Chittenden possessed a strong personality and was highly skilled in his profession. Anderson too was a forceful man and a most competent administrator. Clashes between the two were bound to occur; and they did. Yet Anderson had a great admiration for Chittenden's abilities and, on the whole, the two gentlemen got along well together. Occasionally, a flurry of correspondence would mark some minor disagreement; but these incidents at no time threatened to disrupt the development and managment of the park.

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12. Report of the Secretary of the Interior (1892), 3, 647.

While the construction quartermaster (Devol) was directly responsible for the erection of the buildings, the water and sewage systems, and all other development within the military reservation itself, Chittenden had the responsibility of developing the main road from Gardiner, which then ran in front of officers row. A few years later, Chittenden assumed the burden of laying a concrete sidewalk for the post officers along that road. Between these two realms lay a gray area that both officers could have claimed with considerable justification. This situation rarely became a problem at Fort Yellowstone. Instead of jealously guarding their respective empires, the various construction quartermasters and engineer officers (especially Chittenden, whose two tours coincided with major developments) generally were able to work out agreements as to what would be done by whom. On several occasions, both branches contributed funds to common projects.[13]

Captain Anderson and Troops D and I, 6th Cavalry, transferred from Fort Yellowstone to Fort Robinson, Nebraska, in June 1897 (actually leaving the park on July 6). Although Anderson had requested additional barracks and quarters every year since 1891, he departed without seeing the new structures completed. But his arguments had been heard. Fort Yellowstone was doubled in size that year under its new commander--a brand new, full-bird colonel, Samuel Baldwin Marks Young.[14]

One other structure erected during this period should be noted--the U. S. Commissioner's house and jail. Although built by the federal government, this handsome stone building was not considered to be a military structure. In March 1894, one of Captain Anderson's ski patrols captured a poacher, Edgar Howell, in the act of killing buffalo. This incident gained national publicity particularly through the pages of Forest and Stream. Anderson immediately brought the matter

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13. The above is a generality only. At one time, after Chittenden's first assignment to the park, Captain Anderson became unhappy with the engineer and succeeded for a time in getting the roads and bridges approprations under his immediate control. See Lindsley, "Chronology," p. 149.

14. NA, microcopy M 617, Post Returns; Francis B. Heitman, Historical Register and Dictionary of the United States Army, 1, 1067.

to the attention of the Secretary of the Interior, pointing out that he had no authority to punish Howell except to order him out of the park. As a result of Anderson's forceful presentation of this problem, the Congress passed that same year the so-called Lacey Act that made misdemeanors subject to fines and called for the appointment of U. S. Commissioners to judge law-breakers.

John W. Meldrum received the appointment as the first U. S. Commissioner in Yellowstone National Park. His function was to try and sentence those law-breakers who came before him. Meldrum served in this capacity at Yellowstone for 40 years, until June 1935. In 1894, a contractor began work on the commissioner's stone quarters at the west end of the plateau, underneath the terraces and at the mouth of Clematis Creek gulch. The ground floor contained Meldrum's office and the jail (which was never used), while his living quarters were located on the second floor.[15]

4. Fort Yellowstone, 1897-1908

With the completion of new barracks, officers quarters, stables, and so forth, in 1897, Fort Yellowstone became a two-troop post, which status it retained until 1908-09, when its size again doubled. In additon to the barracks and quarters, a number of other structures were added to the fort during these 12 years.

Colonel Young let the contracts for the new quarters in July 1897. Donlin and Lease won the contract for two double sets of officers quarters, one barracks, one stable, and two more sets of quarters for noncommissioned officers on the staff, for a total of $30,647. W. W. Sykes and Co. got the plumbing and extension of water main contract for $3,436.[16] The structures were generally the same style of architecture as the earlier buildings. In contrast to the earlier period of

15. Annual Report of the Secretary of the Interior . . . 1894, 3 (Washington, 1894), 655; Lindsley, pp. 143 and 148; Carl P. Russell, "A Concise History of Scientists and Scientific Investigations in Yellowstone National Park," mimeograph, pp. 5-6; Hampton, pp. 14-15.

16. NA, RG 92, OQMG, Consolidated File, Ft. Yellowstone, Box 1269.

building, no construction quartermaster was assigned to the post to supervise the work.

The completion date for the buildings has not been determined. Probably, Young pushed the work so that both troops could be housed in the barracks before the winter of 1897-98. About this time, Camp Sheridan ceased to be the quarters for the second troop and, as noted above, the structures there served other functions.

Colonel Young went on leave in November 1897. At the end of his leave he remained away from Yellowstone, having been placed on detached service in Washington. In May 1898, he transferred to assume his duties as commanding officer of the 3d Cavalry. Thus, his impact on the park was light. However, like Chittenden, he would be back. Capt. James B. Erwin, commanding Troop H, 4th Cavalry, became post commander and acting superintendent of the park.

Erwin, a well-liked superintendent, transferred in May 1899, having been appointed regimental adjutant of the 4th Cavalry. His temporary replacement was Capt. W. E. Wilder, 4th Cavalry, whose short time as superintendent (May-June, 1899) was terminated by his transfer to the Philippine Islands. Capt. Oscar J. Brown, 1st Cavalry, assumed these duties in June 1899, but remained in charge for only one year. Following him came Capt. George W. Goode, 1st Cavalry, who held the position for only ten months (July 1900-May 1901).

These rapid changes, caused mostly by the Spanish-American War and the Army's new role in the Pacific, did little to further the efficient administration of the park. The troops rotated as frequently as the officers. No one spent enough time in the huge area to become well acquainted with its management problems. Stability returned with the arrival of Capt. John Pitcher, 1st Cavalry, in May 1901. Like Anderson, Pitcher would be acting superintendent for six years.

The size of the garrison varied during this period from one troop (1901) to five troops (summer 1908). Generally, two troops were assigned permanently to the post, and,

toward the end of the period, two additional troops arrived each summer for temporary duty in the park.[17]

Once the post expansion was completed in 1897, little construction took place during the period of rapid transfers of the post commanders. In 1898, the Army built a small morgue near the hospital. Despite persistent rumors that this building still exists as a residence, it was demolished in later years. Once Captain Pitcher took over as acting superintendent, construction picked up considerably. In 1901, a troop workshop and a set of teamsters quarters (the latter being south of Captiol Hill) were erected.

Hiram Chittenden, now a regular army captain and a Spanish-American War lieutenant-colonel of Volunteers, returned to the park in 1899 (the Corps of Engineers had finally regained control of roads and bridges with the park). He and Pitcher hit it off as well as he and Anderson had done a decade earlier. Now, in 1901, he supervised the contruction of a fine new reservoir at the base of the terraces.

In 1902, a hydroelectric plant went into operation, drawing its source of power from Chittenden's new water system. Also, a buffalo keeper's cabin was erected about one-half mile south of the new reservoir. The next year, attention was paid to the condition of the quartermaster layout. To the south of Capitol Hill, adjacent to the teamsters quarters, a set of stables and a wagon shed were constructed. The need for these buildings bespoke the continuing deteroriation of Camp Sheridan. Upon the plateau, at its eastern edge, the quartermaster also erected a small oil house. Nearby a coal shed was built. In 1905, Pitcher had a well-built post exchange and gymnasium erected. This last proved to be a most important structure for the troops during the long Yellowstone winters.

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17. NA, Microcopy M 617, Post Returns. During this period of rapid changes, there were many occasions when the acting superintendent was absent from the park--on leave or detached service. At such times the next ranking line-officer would assume the responsibilities, technically becoming an acting acting superintendent, although such a cumbersome title was not used.

Shortly after midnight, April 8, 1907, the new cavalry stables caught fire. Although the guard spread the alarm promptly, the building, 26 horses, and two mules were destroyed at a total loss of $11,380. Before the year was out, a new set of stables stood on the same site.[18]

Ever since the fort had been founded, its personnel had been plagued by dust blowing off the barren plateau. The grayish-white formation reflected the sun and presented a harsh landscape for both the military post and the hotel. The new reservoir of 1901 provided a sufficient amount of water for the irrigation of the plateau and, in 1902, Chittenden set out to do something about it. By November, he was able to report that he had realigned the roads, laid 8,337 feet of concrete sidewalk in front of officers row and elsewhere, developed a series of irrigation ditches and water sprinklers for both the plateau and the post itself, and cleared the debris from about 40 acres of ground, which was then "thoroughly graded, plowed and harrowed, and covered with about 4,000 cubic yards of fresh loam to mix with the limestone dust of the formation." The plateau was seeded and through careful attention developed into the attractive area that it is today.[19]

Other improvements of that year included the removal from the center of the plateau of the Haynes Studio and other structures. The Haynes Studio, with the full cooperation of its owner, was moved to the edge of the formation where it continued to function for many years.[20]

Chittenden still had no permanent plant of his own at Mammoth, thanks to the post commander having control of roads the past few years. Furthermore, he had no official quarters for himself and his family. He was not part of

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18. NA, RG 393, U.S. Army Continental Commands, 1821-1920, Ft. Yellowstone, Letters Received, 1905-10, "Proceedings of a Board of Investigations Convened Pursuent to . . . Order," Apr. 8, 1907; Annual Reports of the Department of the Interior, 1901, Part 1 (Wahington, 1901), pp. 531-32. The QM Dept. furnished the funds and the materials for the new reservoir; the Engineer Dept. supplied the skill and the manpower.

19. NA, RG 77, Office, Chief of Engineers, Letters Received, No. 30129/299, Chittenden, Nov. 21, 1902, to Brig. Gen. G. L. Gillespie.

20. Ibid.; Yell. Archives, Letters Received, 3, 1902-03, Chittenden, Apr. 15, 1902, to Prof. W. L. Moore, Chief of the U.S. Weather Bureau; Annual Reports of the Department of the Interior (1903), Miscellaneous Reports, Part 1 (Washington, 1903), pp. 501-02.

the Fort Yellowstone staff, and thus could not claim quarters as a matter of right. When quarters were available, the post commander had allowed him to occupy them as a matter of courtesy.

In 1902-03, Chittenden sought and obtained the required appropriations for a U. S. Engineer Office, residence, and other necessary structures. He selected a site north of the fort, between the hotel and the transportation company's buildings. By the fall of 1902, he had constructed:

1 commissary and storehouse, 100'x24', one story.
1 shop, 80'x24', 2 stories, the upper used as quarters.
1 shed, 100'x20'.
1 shed, 200'x20'.
1 stable, 30'x40'.
1 bunkhouse, 30'x40'.

Next to come was the handsome, stone, two-story U. S. Engineer's Office, facing the plateau from the north side. This building, locally known as the Pagoda, was the first heavy stone building to have been built since the U. S. Commissioner's house in 1891. Behind it, today, stands an attractive cottage-type residence. The records show that Chittenden was well along in his plans for a residence for himself by 1903. Unfortunately, despite an intensive search of written documents and maps, it has not been possible to prove by historical methods that the house he planned is the building standing. (See below, under Individual Structures for a more detailed discussion.)[21]

Other structures erected in the period when Fort Yellowstone was a two-company post should be noted. In 1902, the U. S. Weather Bureau, then under the Department of Agriculture, acquired permission to erect a weather building at Yellowstone. The plans first called for a site on top of Capitol Hill, near Norris' blockhouse. Chittenden was quite dubious about the alleged advantages of this location: "In my opinion he [Prof. Willis L. Moore, Chief, U. S. Weather Bureau] will be

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21. NA, RG 77, Letters Received, No. 30129/299, Chittenden, Nov. 21, 1902, to Brig. Gen. G. L. Gillespie.

very much disappointed after he has occupied it for a short time." To his and Pitcher's relief, Moore agreed. The substantial, two-story, frame building was finally built adjacent to the U. S. Engineer's Office, facing the main post.[22]

By April 1903, on the eve of President Roosevelt's visit to the park, Chittenden had begun the construction of a stone arch at the Gardiner entrance to the park. At the the conclusion of his visit, Roosevelt laid the cornerstone for the arch, which was completed that summer. In contrast to the weather building, the Roosevelt Arch, as it is sometimes called, still stands.[23]

By the early 1900s, Mammoth Hot Springs had taken on the appearance of a busy village. The post itself had begun to lose its rougher edges now that grass grew on the plateau and shade trees framed the well-kept structures. All who lived or visited there were favorably impressed with Fort Yellowstone. Pitcher wrote in 1901 that "this is one of the most neatly built and attractive-looking posts in the country." Chittenden was naturally proud of his contribution. He wrote of Mammoth:

> This is the only point in the Park where an extensive tranformation of natural conditions by the work of man has been permitted. Yet it was unavoidable here, and in yielding to this necessity, the effort has been made to provide a substitute that would be in harmony with the natural surroundings, and would itself be a feature of interest.

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22. Yell. Archives, Letters Received, 3, 1901-03, Willis L. Moore, Jan. 17, 1902, to Pitcher; Chittenden, Apr. 8, 1902, to Major Pitcher (Pitcher was promoted to major in January 1902); Actg. Sect. of Agriculture J. H. Brigham, Apr. 11, 1902, to the Sect. of the Interior; and Chittenden, Apr. 15, 1902, to Moore.

23. Hiram Martin Chittenden, The Yellowstone National Park, Historical and Descriptive (Cincinnati, 1909), p. 246; Bruce LeRoy, editor, H. M. Chittenden, A Western Epic, Being a Selection from His Unpublished Journals, Diaries and Reports (Tacoma, 1961), pp. 24-25.

Visitors recorded their impressions: "On the opposite side [of the plateau or parade ground] Uncle Sam is the chief tenant, the military post consisting of a dozen or more buildings. They have bright red roofs and stand side by side, after the fashion of soldiers." Another wrote: "At the crest of the hill beyond, with the beautiful valley of Gardiner below us, the red roofs of Fort Yellowstone peeping from the green pines. . . ." Still another visitor recorded: "This is the official center of the Park, from which its administration is carried on. There is a two-troop post here, barracks and a military prison [i.e. guard house], a parade ground and a little square of blue-grass, from the center of which floats the flag; and you realize that you are once more in the United States."[24]

The various inspectors general during these years were not always quite as impressed as the visitors. It took an inspector of 1899 many pages to record the shortcomings he found. Many of them dealt with the dilapidated condition of Camp Sheridan--to no one's surprise. He noted that the post did not have a library and reading room. Neither the temporary post exchange nor the bakery were large enough. On the other hand, he was pleased with the condition of the (first) guard house and the (first) hospital. He said that "the names of horse and rider are not placed over each stall in the troop stables," as he thought they should be. But he noted with satisfaction that cats were kept in the granaries to keep the mouse population down. He even found the police of the post exceptionally good--a rariety on the part of an inspector general.

Another inspector, in 1904, echoed Major Pitcher's constant plaint that the post was not large enough. He noted the new post exchange, but regretted that it was not

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24. Annual Reports of the Department of the Interior, 1901, p. 535; Chittenden, Yellowstone, p. 278; C. Hanford Henderson, "Through the Yellowstone on Foot," Outing, May 1899, p. 161; Wade W. Thayer, "Camp and Cycle in Yellowstone Park," Outing, April 1898, p. 118; F. Dumont Smith, Book of a Hundred Bears (Chicago, 1909), p. 200.

a more splendid structure built of stone. Inspections in 1906 and 1907 reflected along similar lines: the clay floors of the stables in poor condition, steam should be used in place of stoves for heating quarters, the barracks latrines were too small, more storehouses were needed, and so forth. Still another inspector, in 1908, complained long about the poor police of the stables, the post exchange, and the cemetery.[25]

Major Pitcher transferred from Fort Yellowstone in July 1907. Since May he had been commanding officer of the post only. His replacement as acting superintendent had been no less eminent a personage than Lt. Gen. S. B. M. Young, USA, Retired. Much had happened to Young since he had last been at Yellowstone as a colonel. Among other things, he had recently been the first modern Chief of Staff of the U. S. Army. The story behind the appointment of the Army's highest ranking officer will be discussed in a later chapter in this report.

Since Young was retired he could neither command Fort Yellowstone nor claim a set of officers quarters. His solution to the latter was simple. He put up as a permanent guest at the Mammoth Hot Springs Hotel. There was no easy solution to the first. After Pitcher's departure, Maj. Henry T. Allen, 8th Cavalry, became post commander. To no one's surprise, conflicts in interest arose between the lieutenant general and the major from time to time. Both Young and Allen left Yellowstone toward the end of 1908. The two positions were reunited with the arrival of Maj. Harry C. Benson in December. Fort Yellowstone would undergo its next and last major expansion under his command.[26]

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25. NA, RG 92, OQMG, Consolidated File, Lt. Col. Theo. J. Wint, AIG, Aug. 30, 1899, to CO, Ft. Yellowstone; RG 393, Ft. Yellowstone, Letters Received, 1905-10, Box 1, Maj. W. E. Wilder, AAG, Dept. of Dakota, ca. Sept. 1904, to CO, Ft. Yellowstone; Lt. Col. W. E. Wilder, report ca. Nov. 14, 1906; Maj. Henry T. Allen, CO, Ft. Yellowstone, Aug. 31, 1907, to himself; and Box 3, Maj. S. W. Miller, IG, July 31, 1908, report.

26. NA, Microcopy 671, Post Returns; Merrill J. Mattes, "Yellowstone Cavalcade," typescript, p. 73; Yell. Archives, Letters Sent, 17, Apr.-Oct. 1907, Young, Oct. 15, 1907, Annual Report; 18, 1907-08, Young, Nov. 20, 1907, to Sect. of the Interior; Lindsley, p. 194.

By 1883, the Northern Pacific Railroad had completed a spur line from Livingston to Cinnabar, Mont., just a few miles north of the park's north boundary. The line was extended in 1902 to the park boundary at Gardiner. It was this extension that occasioned Chittenden's construction of the entrance arch in 1903. Now visitors could step from the train, board a coach at the park entrance, and ride on in style to Mammoth.[27] The railroad made travel to the park much easier and visitation began climbing. The acting superintendents found it increasingly difficult to manage the park with only two permanent troops. They, expecially Pitcher, had been striving to have the garrison expanded into a full squadron of cavalry, that is, four troops.

Pitcher, and other supporters, did not want simply a duplication of the existing structures, as attractive as they were. As early as 1904 he wrote in his annual report: "This post is seen and visited by many distinguished people from all over the world, and for this reason if for none other it should be made a model post in every way." The inspector general of that year echoed him: "The buildings at this post are all frame, convenient and fairly comfortable. It is respectfully submitted that at this station, the one which is probably seen by more foreigners than any other, save, perhaps, West Point, a more dignified shelter for the troops of the country would be in better keeping."

Pitcher repeated this plea as often as he could during the rest of the time he was at the fort. He reminded his superiors that a board of officers had already recommended (Feb. 4, 1902) that the garrison be expanded to a squadron, and that both the commanding officer of the department and the chief of the general staff had made similar recommendations.[28]

27. Jack E. Haynes, Haynes Official Guide, Yellowstone National Park (1912), pp. 35-36.

28. NA, RG 77, DeGrange Index, Ft. Yellowstone; Yell. Archives, Letters Sent, 14, 1903-04, Pitcher, Annual Report, Oct. 13, 1904; Annual Reports of the Department of the Interior, 1905 (Washington, 1905), p. 671; NA, RG 393, Ft. Yellowstone, Letters Received, 1905-10, Box 1, Maj. W. E. Wilder, AAG, to CO, Ft. Yellowstone.

By 1908, the U. S. Congress, the Secretary of the Interior, and the Secretary of War were all in agreement. Fort Yellowstone would be expanded; and the new structures would be as handsome as Pitcher had dreamed.

5. Fort Yellowstone, 1908-1916

In November 1907, Major Allen sent two samples of building stone to the Quartermaster General for examination. These samples had come from two quarries near Fort Yellowstone, one located below the fort on the road to Gardiner, the other in Clematis Gulch about 700 yards away. Stone from both these locations had been used in the construction of the U. S. Commissioner's house several years earlier. They would be judged as satisfactory.

Second Lt. Reynolds J. Powers, squadron quartermaster at Fort Yellowstone, was placed temporarily in charge of the new construction in February 1908. But in early March he was replaced by the arrival of Capt. Joseph R. Castner, QMC, who took charge of the construction until October, when 1st Lt. Gilbert C. Smith was detailed to the job. Smith lasted a year. Following him were 1st Lt. Ralph M. Parker and Harry S. Hodges (rank not known), the latter serving in the position of construction quartermaster until June 1911, when the position was abolished.[29]

Four days after he took over his job, Captain Castner wrote a long letter to the Quartermaster General, giving his reasons for stone construction. To quell any uneasiness about instability of the plateau, he reported that the "engineers building . . . is a two story and cellar stone building, this is the heaviest building on the formation and shows no settlement." Furthermore, "I believe that all the weak spots have been found and broken through." He summarized the achitecture of the existing buildings:

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29. NA, Microcopy M 671, Post Returns.

> Present buildings of the post are plain cottage construction, tin roofs except the Post Exchange, which is Colonial, with slate roof.
>
> The Engineer's building is a very fine full cut sandstone, in looks equal to Oolitic Limestone, building has a tile roof.
>
> Weather Bureau building, Colonial.
>
> Mammoth Hotel is a very plain, large building with no distinctive features.
>
> Transportation Company's buildings are an artistic rustic construction.
>
> Remaining buildings [private residences, stores, etc.] are all of frame, Cottage construction, except the U. S. Commissioner's building, which is a modern stone building, from native stone.

He gave five reasons for using stone over brick or frame: 1. The post commander wanted stone. 2. Stone was easily obtainable. 3. Stone offered fire protection. 4. Stone was relatively cheap. 5. Stone possessed architectural values. As far as the park's stone was concerned, he said that it was not of a quality suitable for cut rock and that he recommended that wherever possible "rock face" be used. For the stone in the water table, sills, and lintels he suggested that this be procured from Columbus, Mont. It was a light-colored, very fine sandstone that Chittenden had used for similar elements in the U. S. Engineer's Office. As for roofs, he recommended slate. Other advice that he offered was that the doors be veneered--"birch face, white cors [sic]," and that maple flooring be used, "as it is cheapest and best."[30]

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30. Yell. Archives, Letters Received, 7, 1906-08, Capt. J. C. Castner, Mar. 10, 1908, to the QMG.

The plans called for: a set of field officers quarters as a residence for the post commander/acting superintendent; a double set of "captains" quarters; a bachelor officers quarters, having a club and apartments for eight officers; a double barracks, large enough for two toops; two stables, each for 94 horses; and a double blacksmith shop. The total cost was estimated to be $197,200, plus plumbing, wiring, and heating. This figure was thought to be approximately 15% higher than the cost of frame structures.

Castner recommended two changes in the plans as then drawn up: That the bachelor officers quarters be reversed from its present plan so as to place the club at the north end of the line. (Perhaps he did not need to point out that if it were in the south end of the building, the noise would disturb the neighbors down the line.) And that two additonal rooms be added to the attic of the field officers quarters, since that officer had to entertain so much. "Personally," wrote Castner, "I believe the conditions absolutely demand a Commanding Officers set of quarters." He was referring to the standard plans for the residence of a colonel or above--a larger house than authorized for majors or lieutenant colonels.[31]

The Quartermaster General denied the commanding officers quarters, but eventually did allow the extra rooms in the planned quarters. Also, the QMG suggested that a double stable (188 horses) would be a much too long building and recommended two separate stables with the blacksmith and stable guard building so located as to serve both. This suggestion was put into effect. Agreeing with Captain Castner, the QMG said that the roofing should be slate, "which is now almost universally used . . . in all permanent construction, will be found most suitable, and preferable to tin.[32]

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31. Ibid.

32. NA, RG 393, Ft. Yellowstone, Letters Received, 1905-10, Box 2, OQMG, Feb. 13, 1908, to Construction QM, Ft. Yellowstone.

By September 1908, an army of workmen were engaged for the construction project. The post medical officer became quite concerned about the hygieneand sanitation of their temporary camps:

> There are at present 212 civilian workmen employed upon construction work in the post. These, together with their necessary domestic attendants and families, make up a transient population of not less than 250 persons.
>
> * * * * *
>
> A tent town has sprung up in too close proximity to the construction work and closely encompassing two sides of the original post boundaries and extending to the extreme habitable limits of the reservation on its northeast border.

According to his observations, garbage was strewn about and terribly primitive privies were being employed. At that time, post children were attending school in the post exchange. But laborers were trooping into the building to use its toilets, and conditions there had become foul.[33]

The expansion of the post resulted in changes to the military reservation. The reserve had long been unsatisfactory despite several adjustments over the years. Camp Sheridan, the U. S. Engineer's complex, and the quartermaster buildings south of Capitol Hill had never been included. Some structures were located on the boundary, being half on and half off the reservation. General Young even denied there was a formal reserve: "There may possibly be authority for making a military reservation inside the boundaries of the Yellowstone Park, but I have failed to discover such."

Despite Young's confusion, the Army considered that there was indeed a reserve, even if unsatisfactory in nature. In 1909, before the final adjustment, the reservation was considered to be that area that the Secretary of the Interior had assigned to the War Department in letters dated Feb. 27, 1891;

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33. NA, RG 393, Ft. Yellowstone, Letters Received, 1905-10, Box 3, 1st Lt. J. M. Wheate, MRC, Sept. 21, 1908, to Adj., Ft. Yellowstone.

May 11, 1893; and Oct. 18, 1897. The original 22½ acres had grown to about 37.75.[34]

Young had also constributed to the problem when he recommended that Interior lease to the Yellowstone Park Transportation Company the same area that Pitcher and others were eying for the expansion. Young's action was probably directed by his belief that the Army would soon leave the park and that the expansion of the post would not be needed. Major Benson wrote bitterly: "It was very unfortunate for the military interests that a lease was granted to the Yellowstone Park Transportation Company covering lands which were not essential to them and were essential for use of the military post, without the post commander having had an opportunity to report upon the same."[35] This problem was quickly solved and the transportation company built its proposed warehouse elsewhere. At one point, however, a frustrated Benson was ready to move his headquarters to the west entrance, today's West Yellowstone.

The final military reservation, which reached out far enough to the north to include the U. S. Engineer's buildings, amounted to 43.38 acres. The boundaries were announced in General Order No. 238, War Department, Nov. 30, 1909:

> Beginning at a concrete monument painted red, situated about 320 feet to the eastward of the hay-shed . . . running thence N2°43'W, 1360.1 feet to the center of a stone monument painted red, from which monument the southeast corner of the new stone stable at Fort Yellowstone bears S71°14'W, and is distant 327.5 feet; running thence S89°44'W, 1118 feet, to the intersection of the center lines of Avenues "C" and "G"; thence N38°35'W, 230 feet; thence N51°54'E, 196.77 feet; thence N20°59'W, 292.9 feet; thence S62°55'W, 122.7 feet; thence S23°50'W, 246.7 feet; thence S13°22'E, 460.16 feet, to the intersection of the center lines of Avenue "B" and "G"; thence S13°32'E, 792.6 feet, along the center line of Avenue "B" to its intersection with the center line of Avenue "A",

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34. Yell. Archives, v. 34, S.B.M. Young, Jan. 31, 1908, to Maj. Gen. J. F. Bell, Ch. of Staff; NA, RG 77, Entry No. 413, "Plans of Army Posts in the United States," Ft. Yellowstone, Plan No. 164.

35. Yell. Archives, v. 104, Benson, Apr. 13, 1909, to Sect. of the Interior.

thence S40°40'E, 575 feet, along the main road to Gardiner, thence S39°31'E, 508.3 feet along said road; thence N61°20'E, 318.6 feet; thence N40°39'E, 324.4 feet, to the point of beginning; containing in all 43.38 acres, more or less.

With Fort Yellowstone now a four-troop post, Major Benson had to give thought to other structures. The post hospital, which also admitted civilians, was now too small. A $45,000 appropriation for a new hospital was made in 1909, but the Surgeon General disapproved of the site selected. The new stone hospital, at the south end of the post, was not built until 1911.[36]

An inspector general visited the post at the end of August 1909, when construction of the new barracks had been completed and the troops had occupied the huge building. He recommended still more construction at the post: a riding hall for winter use, a new root house, an ordance storehouse (existing one was merely a dugout), and a new magazine to replace the old one at Camp Sheridan. However, most of these recommendations were never acted upon.

He also took a critical look at the new stone structures. He found that their walls and ceilings were pitted, due to plastering falling off; the water closet fixtures had been flimsily attached to the walls and broke loose easily; and that neither curtains nor screens had been provided for the barracks.[37]

Several other changes in the appearance of the area occurred during the Army's last years there. The most significant of these was the construction of a handsome stone chapel in 1912-13. About this time, a concrete pipeline from the upper Gardiner River replaced the old open ditches of the water system. In 1912, too, fire destroyed the last of the old

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36. Yell. Archives, v. 61, Maps, 1909-14, G. O. No. 238, War Dept., Nov. 30, 1909; v. 104, 1st Asst. Sect. of the Interior, Apr. 6, 1909, to Actg. Supt., Ft. Yellowstone; Benson, Apr. 13, 1909, to Sect. of the Interior. The old frame hospital eventually became post headquarters.

37. NA, RG 393, Ft Yellowstone, Letters Received, 1905-10, Box 5, Report of E. A. Garlington, IG, Sept. 1, 1909.

McCartney buildings, the oldest structure at Mammoth. At the time of the fire, Chinese were using the structure as a laundry.[38]

The strength of the post, including the detachments in the park, usually numbered well over 200 during these last years. Each troop at that time was authorized 100 enlisted men, but the largest number shown in the post returns for any one month was 324 (Nov. 1910). An innovation as far as the park was concerned was the arrival of a machine gun platoon in 1910. Its main job, however, was the erection of a telephone line. In 1914, the troops at the post were reorganized. Their traditional troop letters and regimental numbers were assigned elsewhere and they became known as Troops 1 and 2. Although "Cavalry" was not used, they continued to be mounted troops. Major Benson transferred from Yellowstone in the fall of 1910. Maj. Lloyd M. Brett, 1st Cavalry, replaced him as the last post commander.

Two park visitors in these last years were favorably impressed by the appearance of Yellowstone: "Mammoth Hot Springs seems quite a town. The hotel is a very large structure and should be replaced by a new one, as it is badly needed. The houses occupied by the soldiers are very substantial buildings. I saw a number of very beautiful Bungalows." And a young lady wrote:

> As one enters the Springs it seems like going into a little city. There are well cared for streets and lawns, a number of pretty bungalows, and several more pretentious houses; most of them are the residences of officers, for this is known as Fort Yellowstone, in army circles. I am told that there are about two hundred cavalrymen located here. The commanding officer is the superintendent of the Park but is under the supervision of the Secretary of the Interior.

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38. Mattes, pp. 78-79; Yell. Archives, v. 104, Actg. Supt., Dec. 4, 1912, to Sect. of the Interior; Lindsley, p. 208.

> The headquarters of the U. S. Commissioner is also here, as also are the Weather Bureau and the Engineer's Office . . . a handsome hospital and a church are in construction.[39]

Aubrey L. Haines has estimated the total cost of Fort Yellowstone, omitting Camp Sheridan. The buildings he estimates at $552,000; the utilities, $75,000; and the parade ground, sidewalks, roads, and street lighting, $75,000. The total expenditure amounted to about $700,000.[40]

In 1916, the Secretary of War returned the administration of Yellowstone National Park to the Secretary of the Interior. Major Brett made his last entry in the post returns: "Post Officially abandoned October 26, 1916." He added: "Captain F. T. Arnold with Detachment QM Corps remained to complete shipment of furniture, etc." A few days earlier, Brett and the incoming Interior administrator, Chester A. Lindsley, had written a joint report to the Secretary of the Interior concerning the transfer of authority. Perhaps it was Brett who penned with touches of pride and nostalgia: "Their duties have been well and creditably performed, and the 30 years of military control will be memorable ones in the history of the Yellowstone National Park."[41]

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39. J. A. Heasley, A Summer Vacation in the Yellowstone National Park (Grand Rapids, 1910), p. 67; L. Louise Elliott, Six Weeks on Horseback Through Yellowstone Park (Rapid City, 1913), p. 140.

40. Haines, "The Yellowstone Story," Ch. 16, p. 7.

41. Reports of the Department of the Interior . . . 1916 (Washington, 1917), p. 789, joint report by Brett and Lindsley, Oct. 16, 1916. Chester A. Lindsley arrived in Yellowstone in 1894 on a visit to his brother, 2d Lt. Elmer Lindsley, who was stationed at the post. It was a long visit. He first took employment with the Yellowstone Park Hotel Company, but soon after accepted employment with the Department of the Interior as its clerk on the acting superintendent's staff. He held that position until 1916, when he was selected to be the civilian superintendent. By then he had an intimate acquaintance with the park and its management. Working closely with the many army officers over the years, he was the agent through whom the transitions were smoothly made at transfer time.

6. Fort Yellowstone, Since 1916

Lindsley, whose new title was acting supervisor, had only one year in which to enjoy his duties as the sole boss of the park. In its appropriations for Fiscal Year 1918 (which began July 1, 1917), the U. S. Congress failed to pass an appropriation for the newly-established National Park Service. Lindsley blamed this on local opposition to the concept of a civilian administrator of Yellowstone. The result was the return of the U. S. Army to the park to provide the protection force for one more year.

Lt. Col. Edmund M. Leary, with the First Squadron, 7th Cavalry, arrived in the park on June 26, 1917. That which followed was a complicated situation. Leary's officers and men reoccupied the post's buildings, and performed protection duties. Lindsley, retained his position and was responsible for the administration of the park. His small force of Interior employees performed the necessary maintenance of the buildings, grounds, shops, storehouses, water system, power plant, etc., at Mammoth. All this time, the U. S. Engineer Officer, who was Capt. John W. N. Schulz, retained the responsibility of developing roads and bridges.

That conflicts errupted from time to time was to be expected under this bizarre arrangement. What was surprising, perhaps, was that the management and protection of the park proceeded with as little difficulty as it did. On July 1, 1918, the U. S. Engineer Officer was relieved of his duties and Lindsley's civil engineers took over the responsibility of developing roads and bridges. The National Park Service got into business again, and on Oct. 31, 1918, the Army left the park for good. Lindsley was now, finally, in full control. On June 28, 1919, Horace M. Albright became the superintendent of Yellowstone. Lindsley stayed on for the next three years as an assistant to Albright.[42]

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42. Lindsley, pp. 224-25, 228-29, 235-36, 239, and 247.

When the Army first left, in 1916, the U. S. Engineer Officer watched enviously as the civilians took over the post. He felt that he and his staff were inadequately housed and quickly sent a request through channels asking that certain buildings not be transferred to Interior. His request was not modest:

1 double set of stone officers quarters (for himself and a junior officer)
2 sets of wooden officers quarters) for his civil service
2 sets of NCO quarters) employees
½ of the double stone barracks (for laborers and mechanics)
the stone blacksmith shop or a stone stable (for storing autos and trucks)

All of his request was granted. But when he learned a year later that the troops were returning, he became alarmed that he would lose his own quarters. But with the transfer of his duties to the U. S. Department of the Interior in 1918, the problem of his housing disappeared.[43]

When the troops left in 1916, the Secretary of War turned over to the Secretary of the Interior all the structures at Fort Yellowstone, without cost, and all the improvements at Mammoth except these structures reserved for the Engineer Officer (above). Interior acquired these buildings in 1918. From then until today, park headquarters has remained at Fort Yellowstone. Lindsley, Albright, and their successors adapted the various structures appropriately to the park's needs. Many have continued to serve in the roles they played in Army days, particularly the quarters on officers row. As the years passed many other structures were demolished when, because of deterioration or technological changes, they no longer could serve useful purposes.

Yet change has come slowly to Fort Yellowstone. Officers row remains intact. Nearly all the stone buildings still stand, their appearance enhanced by the passing years. A number

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43. NA, RG 77, Ft. Yellowstone, Letters Received, no. 30129/1627, W. M. Black, Ch. of Engrs., Sept, 5, 1916, to Sect. of War; and no. 30129/1763, Maj. Armos A. Fries, CE, Yellowstone, June 9, 1917, to Ch. of Engrs.

of the original frame buildings of 1891 still stand as evidence of Fort Yellowstone's earliest days. Together they present to the observer a picture of an extraordinarily handsome Western Army post at the turn of the century. Anderson, Chittenden, Pitcher, and the others had the right to be proud of their fort.

B. Brief Histories of Individual Structures

> This post is seen and visited by many distinguished people from all over the world, and for this reason if for none other it should be made a model post in every way.
>
> -- Pitcher, 1904

1. Historic Structures Still Standing

The histories of the historic structures still standing, which would ordinarily appear here, are to be found as sub-sections in the architectural data section of this report. This arrangement was arrived at so that the reader might find all the information about each standing structure in one place in the report.

2. Miscellaneous Structures, Etc.

Cemetery (No Army no.)

The military cemetery at Mammoth was established while Camp Sheridan was still the park headquarters. The first recorded burial was that of Pvt. Thomas Horton, Company C, 22d Infantry, on October 1, 1888. (The Infantry detachment had left the park on September 3.)

A 1908 inspection report disclosed that three graves had not been marked and that the grass was high. A year later an inspector reported that nine graves were unmarked and the gate was broken.

When the Army left in 1916, 54 (perhaps 55) graves were to be found. Of these one was the grave of an army officer, 13 were enlisted men, the rest were civilian employees of the Army, children and other relatives of military and civilian personnel, and a few citizens.

On abandoning Fort Yellowstone, the Army first planned to remove all the remains and headstones to the Custer National Cemetery, Crow Agency, Montana. Actg. Supervisor Lindsley suggested, however, that many of the graves were civilian and that surviving relatives whom he knew preferred that the remains not be moved. The Army agreed with Lindsley that those should stay, providing that the Interior Department would maintain the cemetery.

In July 1917, nineteen bodies, all soldiers or civilian employees of the Army, were moved to the Crow Agency. The rest stayed at Yellowstone. The cemetery, located a mile or two south of the post, near the road to Norris, is today much as it was in 1917. The heavy iron pipe fence, erected by the Army in 1915, still encloses the site. Tall trees give shade and shelter. Off to the northwest, the great white terraces of the hot springs contribute their sense of eternity. Most of the grave markers are stone, but here and there stands a weatherbeaten headboard, its lettering all but removed by time. They may be identified through the records in the Yellowstone Archives.

Sources: Yell. Archives, 104, Transcript from the Record of Interments, Post Cemetery; Col. Thomas Slavens, QM, San Francisco, Mar. 30 and June 23, 1917, to Lindsley; Lindsley, Apr. 9, Apr. 13, May 24, and June 1, 1917, to Dept. QM, San Francisco; Lt. Col. F. W. Coe, Western Dept., Apr. 30, 1917, to the AG, Washington; and Joseph S. Colter, Actg. Supt. of the National Parks, Aug. 2, 1916, to Colonel Brett, Ft. Yellowstone; NA, RG 393, Ft. Yellowstone, Letters Received, 1905-10, Box 3, Maj. S. W. Miller, IG, report of inspection; Box 5, E. A. Barlington, IG, report of inspection, Sept. 1, 1909.

Grounds and Parade

Both the post quartermaster and the U. S. Engineer officer had responsibilities for the improvement and maintenance of the Mammoth Hot Springs area. The quartermaster's authority stopped at the reservation boundary when it came to spending military appropriations (except for some specific things such as the water system and the Camp Sheridan buildings). The engineer officer was responsible for the roads through the area. Because the engineer officer had considerable funds, equipment, and labor, he often could, if he were interested, stretch his responsibilities to include undertakings that at most posts would be done under the quartermaster's direction. Chittenden was just such a man. On his second tour of duty in the park especially he enthusiastically undertook the landscaping of the plateau at Mammoth.

When Fort Yellowstone was first built, the plateau was a white, barren, sandy area, it being a large terrace or formation built by the hot springs. Here and there on its surface were the depressions left by extinct springs. In the beginning, the Army was somewhat concerned that subterranean passages might underlie much of the plateau and that cave-ins

might result from construction. Time proved these fears largely unfounded:

> The area used as a drill ground by the troops . . . lies between the Mammoth Hot Springs hotel and the row of officers' quarters. It is not part of the military reservation, is a crust of lime powdered, garish colored, dusty matter and has several holes in it, revealing, deep, unexplored caverns beneath. One of these holes was made by a cavalry horse during mounted maneuvers. Some believe that numerous subterranean caves exist and some predict that area is a mere shell that may cave in any day. Portions of the formations shoud [sound?] hollow. The wife of a cavalry officer stationed here says that sometimes at night she can hear sounds, as of a geyser, beneath her husband's quarters.

A word should be said about the term "parade ground." Visitors and residents used the term to mean several different things during the army period. Sometimes it meant the whole area bounded by Capitol Hill, the terraces, the hotel, and the fort. At other times it meant a much smaller area immediately in front of officers row and bounded by the road in front of the row and another road farther west; this latter was the "main" route of travel for visitors from Gardiner to the hotel.

In 1891 there were several buildings out on the plateau itself, the most prominent being the residence and barn of Jack Haynes, Yellowstone's famous photographer. While these buildings were generally considered intrusions, visitors enjoyed the scene anyway: "And yet the scene from the broad piazza of the pleasant hotel is very attractive. Sometimes its interest is increased by the drill of a troop of cavalry." By 1894, such structures as a blacksmith shop and a saddler's shop, both belonging to the Yellowstone Park Association, had been removed. And, in 1902, the Haynes buildings were moved to another location--with the full cooperation of Mr. Haynes.

In 1895, nearly a mile of board sidewalk was laid between the various buildings on the north side of the plateau and the fort. That same year, Captain Anderson experimented with

planting grass on the plateau. The test was so successful that Anderson wrote the Secretary of Agriculture asking for enough timothy or clover seed to plant the whole plateau. But, two years later, the plateau still had not been developed.

Colonel Young was a little hesitant in doing work on the plateau since it was outside the military reservation. He was certain that he wanted a parade ground--all army posts had parade grounds. But he undertook no extensive programs to develop one.

Chittenden returned to Yellowstone in 1899. His arrival marked the real development of the plateau. About this time, as Aubrey L. Haines has recorded, Warren H. Manning, Boston, Mass., developed a landscape plan for Mammoth, free of cost. Apparently this plan provided the basis for the work that followed; however the plan was not carried out in full.

The departmental quartermaster wrote the post commander in 1901 bringing him up to date on plans for the area: "My idea for soiling the plateau is simply to save the manure from the stables of the Transportation Company and the Post, and spread it in the Fall, covering as much ground as possible. In the Spring rake off the loose stuff and seed down." He said he was in contact with Chittenden primarily because he himself could not spend quartermaster money outside the reserve. The following spring, Chittenden outlined the work that was scheduled. After realigning the roads in the area, "we desire to convert that entire space into lawn, surrounded by shade trees along the lines of the roads, and to have a careful system of electric lighting all over the parade." By autumn, Chittenden could report that the work had been accomplished:

> This work has been very extensive and has completely transformed the appearance of that place. The roads have been entirely re-alligned [sic], graded and heavily surfaced with gravel brought from Capitol Hill. About 1½ miles of roadway were thus constructed. . . .
>
> Concrete sidewalk of extra heavy quality was built covering the entire grounds as far as the needs of the place require. Its width is 4 feet. The total length laid was 8,337 feet. . . .

> On each side of each road an open ditch for flowing water was constructed, with vitrified pipe culverts under the roads, and numerous concrete diverting sluices so that the flow can everywhere be regulated at will. These ditches will supply water for the support of shade trees and the irrigation of the plateau.
>
> * * * * *
>
> The entire grounds . . . about 40 acres, were cleared of debris, thoroughly graded, plowed and harrowed, and covered with about 4,000 cubic yards of fresh loam to mix with the limestone dust of the formation.

Captain Pitcher cooperated by developing the grounds within the post limits. He had grass planted around the barracks and the officers quarters. The planting succeeded and today the plateau is still a green expanse. Asphalt has replaced the gravel roads. Some roads have again been realigned. But the general plan today is essentially the same as that developed in 1902.

Sources: Yell. Archives, Letters Sent, 3, 1889-92, 1st Lt. G. H. Sands, Feb. 18, 1891, to Sect. of the Interior; 5, 1894-96, Anderson, Jan. 17, 1895, to Sect. of Agriculture; 7, 1897-98, Young, Sept. 10, 1897, to Sect. of the Interior; Letters Received, 3, 1901-02, Geo. E. Pond, QM, Dept. of Dakota, May 7, 1901, to Capt. G. D. Goode, Ft. Yellowstone; and Chittenden, Apr. 15, 1902, to Prof. W. L. Moore, U. S. Weather Bureau; Sect. of the Interior Letters, 21, Lt. Col. C. H. Heyl, IG, Feb. 1, 1902, to Sect. of War; Yell. Library, Scrapbook no. 4208, unidentified clipping, "Yellowstone in Winter," Mar. 24 [1891]; Sect. of the Interior, Annual Report (1894), p. 652; (1895), 3, 821; (1902), p. 464; NA, RG 77, Letters Received, no. 30129/299, Chittenden, Nov. 21, 1902, to Brig. Gen. G. L. Gillespie; Lindsley, p. 153; Haines, "The Yellowstone Story," Ch. 16, p. 5.

Reservoirs, Water System

First Reservoir, Army No. 36

When Fort Yellowstone was founded, the Army received permission from the Dept. or the Interior to use water

from Clematis Creek. A dam was constructed a short distance up the gulch and underground pipes carried the water across the plateau to the fort. This system sufficed until the expansion of the post in 1897. The next year, a contract was given to John H. Pisor to construct a reservoir proper at the site of the dam. The amount of the contract was $4,900. The reservoir contained 100,000 gallons.

Second Reservoir, Army No. 36A

Three years later, after Chittenden had returned to the park, the decision was reached to build a new, much larger reservoir south of old Camp Sheridan. This site was the same natural depresssion from which Norris had got his water many years before. Both Chittenden and the post quartermaster contributed toward its construction. Chittenden's men dug an open ditch from Glen Creek, which flows through Golden Gate Canyon, to the reservoir site:

> The reservoir . . . comprises . . . a little over an acre and its capacity is . . . nearly 2,000,000 gallons. The site is a natural depression . . . but required a dam at each end. . . . The dam at the upper end was made from the excavation in the reservoir basin itself. . . . The embankment has a width of fully 15 feet on top and 25 feet at the bottom. The main dam . . . [is] a concrete structure 180 feet long and about 12 feet high. . . .
>
> * * * * *
>
> The main leading from the reservoir . . . consists of 10" cast iron pipe. The digging of the trench was of extreme difficulty. . . . It was necessary to blast nearly all the way. . . . Another source of difficulty . . . was the opening up of numerous springs. . . .
>
> * * * * *
>
> A hydrant for filling sprinklers (for sprinkling roads) and another for fire purposes were provided for the old post. Just at the foot of the hill . . . a 10" by 6" Tee was introduced in order that a pipe could be laid to the new military post if it should ever be found desirable. . . .

> At a point where the new line crosses the pipe line from the old reservoir a careful system of valves was put in to give control of both supplies. A 6" pipe here was taken out . . . in order to release the water for irrigation. . . . The two systems were so connected that either or both can be used for domestic purposes for irrigation. . . .
>
> * * * * *
>
> [The irrigation] water is under a pressure of about 100' head [thus it was necessary] to reduce the velocity. . . . For this purpose a circular basin, 20' diameter and 4' deep was built of concrete, the top of the wall being given a knife edge in order that the water might flow over it in a thin sheet.

The new reservoir cost the Army $8,000. In 1916, when the Army turned over its improvements to Interior, it listed the "water pipe line" at a value of $62,000--as separate from the two reservoirs.

The circular basin that Chittenden described was ornamented with a basin pedestal on which stood a bronze child holding a fish. Water fell from the pedestal to the basin, then poured over the rim of the basin into the irrigation system. The water entered the basin under great pressure, which caused it to swirl around the inside and surge up over only a portion of the rim, rather than with the even curtain that Chittenden had in mind. Further work on his part eventually corrected this problem.

Sources: Yell. Archives, Sect. of the Interior Letters, 2, Brig. Gen. T. H. Ruger, Dept. of Dakota, Jan. 16, 1891, to AG, Washington, with indorsements; "Statement of Buildings at Fort Yellowstone, Aug. 1, 1916;" NA, RG 77, Letters Received, no. 30129/192, Chittenden, Nov. 15, 1901, to Chief QM, Dept. of Dakota; NA, RG 92, OQMG, Consolidated File, Ft. Yellowstone, Box 1269, Contracts; Haines, "The Yellowstone Story," Ch. 16, note 7.

Paint

During most of the army period, if not all, the frame buildings at Fort Yellowstone were painted white. The roofs were bright red. Apparently, too, the trim on the buildings

was painted red. The tile roofs on the stone buildings were also red so as to match the rest of post. (The U. S. Engineer Officer, on the contrary, chose green for the roofs of his buildings.) Residents and visitors to the park consistently thought these colors presented an attractive scene:

> A resident:
> On the opposite side [of the parade] Uncle Sam is the chief tenant, the military post consisting of a dozen or more buildings. They have bright red roofs and stand side by side, after the fashion of soldiers.

> A visitor:
> At one end [of a field] is the soljers' post wid a row ov wery neat white painted wood nouses fur the captings an a long buildin back an two rows a' tan colored tents a bit aside, an a flag pole.

> A visitor:
> At the crest of the hill beyond [Mammoth], with the beautiful valley of Gardiner below us, the red roofs of Fort Yellowstone peeping from the green pines. . . .

Although the U. S. Engineer's Office had a green tile roof, red and white paints were used elsewhere on the structure. The building specifications called for "National Lead Co.'s Red Seal brand of red lead and Atlantic Brand of white lead or their equals."

Two or three additional comments concerning painting have been extracted from the Army records. In 1905, Captain Pitcher submitted an estimate for painting nearly all the buildings. He said that they needed fresh paint in order to keep the post looking "as neat and trim as possible." An inspector general agreed with him a year later: "All the buildings except the Quartermaster's Stables Need painting. The old paint is peeling off in places." In 1909, the post quartermaster announced that arrangements had been made to "clean, repair and paint the chimneys on the officers' line, Non-commissioned officers line and barracks."

Not only were the buildings well designed and their arrangement attractive, their colors, set against the greens of the landscape, contributed to the desired effect of making Fort Yellowstone one of the most striking posts in the army establishment.

Sources: NA, RG 77, Letters Received, no. 30129/295, "Specifications for U. S. O. Office Building," NA, RG 393, Fort Yellowstone, Letters Received, 1905-10, Lt. Col. H. E. Wilder, IG, Nov. 10-14, 1906, inspection report; and 1st Lt. Ely, QM, Ft. Yellowstone, Feb. 23, 1909, to Adj., Ft, Yellowstone; NA, RG 393, Letters Sent, 1903-06, Pitcher, Jan. 18, 1905, to Chief QM; Henderson, pp. 161-67; Shuffle, p. 36; Thayer.

Anderson Residence

At the west end of the formation, north of the U. S. Commissioner's building, stands an attractive frame residence today. Although an exhaustive study of the history of this building has not been made, it is thought to be the house built by Ole Anderson in 1896.

Anderson was, in modern terms, a concessioner in the park. In 1895 he acquired a lease on this property in order to erect a building "in which to conduct the business of coating specimens." Anderson took glass bottles and other objects and placed them in hot springs until they had acquired a coating of the sediments in the water. Prior to building his house, he had been living in a tent.

One year later, the post commander, Captain Anderson (who is not believed to have been a relative of Ole), wrote that the building was nearly completed: "It is a neat looking cottage, the equal of any now on the plain."

Sources: Report of the Secretary of the Interior (1895), 3, 823; and (1896), 3, 717.

Sundown Gun

The first time that a piece of artillery was listed in the post returns was in December 1890, a few months before Fort Yellowstone was founded. This does not mean that artillery was not previously present, for no part of the post return from was more neglected than the tiny corner of it that was

reserved for such information. Intermittently over the years the entry reappeared, and one is safe in assuming that at least one piece of artillery was present at Fort Yellowstone throughout its history. When it was identified, the piece was shown as a light 12-pounder. (A 1916 photograph of the sundown gun suggests that it was a 12-pounder boat howitzer or possibly a Napoleon, rather than a 12-pounder gun howitzer. A boat howitzer was both lighter and easier to keep highly shined.)

This weapon was not present for offensive or defensive purposes. It was both for show and for firing the sundown salute, an event that became a tradition at Yellowstone. The only ammunition kept for the gun was blanks. For example, in July 1892, a report stated that "256 blanks, field piece" were then on hand.

It is quite possible that there were more than one piece of artillery at the post. Pitcher reported in 1903: "The guns and carriages at this post are very old and it is impracticable to do much with them except to paint them. The wheels have been raised from the ground." Another reason for suspecting more than one piece present is that while most descriptions record that the sundown gun was located on Capitol Hill, an illustration, ca. 1913, shows a piece standing near the flagstaff on the plateau. Further, in 1907, when a stable caught on fire, a guard gave the alarm by firing a field piece that was somewhere nearby, probably on the parade. (He first went to the guard house and got a blank round from one of the cells.)

In addition to the 12-pounder(s), a Gatling gun was at Fort Yellowstone at one time. An inspector general in 1906 reported: "One Gatling gun and 1400 rounds ball cartridges on hand reported surplus." (Another inspector in 1899 also referred to a "machine gun," probably meaning the Gatling.)

In various sources there are hints that both soldiers and civilians were fond of the tradition of the firing of the sundown gun. (The soldiers detailed to climb the hill each evening did not record their sentiments.) A newspaper item of uncertain date stated: "At sundown the booming of cannon and the blare of the military bugle remind him of Uncle Sam's paternal care of his domain." John Burroughs, visiting Yellowstone with President Roosevelt in 1903, wrote: "When the sundown gun was fired a couple of hundred yards away, they

[feeding deer in front of officers row] gave a nervous start, but kept on with their feeding." And, finally, from the pen of a visitor: "Fur a lass walk here, I jus then took a good half hour to go across the open an climb up that bare hill in front . . . where's them cannon, one o' wich they fires allus at sunset an sunup."

Jack Haynes photographed the last firing of the sundown gun in 1916. Four enlisted men and an officer were present on Capitol Hill at that dramatic moment. This scene by Haynes, more than any other, symbolized the change from military to civilian administration.

Sources: NA, Microcopy M 671, Post Returns; RG 393, Ft. Yellowstone, Letters Received, 1905-10, Lt. Col. H. E. Wilder, IG, Nov. 10-14, 1906, inspection report; and "Proceedings of a Board of Investigation convened pursuant to" S. O. No. 15, Apr. 8, 1907; RG 393, Letters Sent, 1903-06, Pitcher, Nov. 8, 1903, to the AG, Dept. of Dakota; NA, RG 92, OQMG, Consolidated File, Ft. Yellowstone, Box 1269, Lt. Col. T. J. Wint, IG, Aug. 30, 1899, to CO, Ft. Yellowstone; Campbell, p. 28; Shuffle, p. 36; Yell. Library, Scrapbook, Yellowstone Park No. 2, no. 462, unidentified newspaper clipping; John Burroughs, Camping & Tenting With Roosevelt (Boston, 1907), p. 28.

3. Structures No Longer Existing

This section outlines briefly the histories of a number of military structures no longer standing at Fort Yellowstone and Camp Sheridan. Since no reconstruction of any of them is contemplated at this time, documentation is not presented. The same sources were used as are shown in the preceding sections and/or in the bibliography. Complete documentation is on file.

First Hospital, Army No. 14

Frame construction. Completed 1894. Cost, $11,725. Capacity reported as both 8 and 10 beds. A visitor of 1903 wrote: "The little Post Hospital is open to civilians in need of medical or surgical service, a great privilege for the visitors as well as inhabitants of the Park. Drs [1st Lt. Francis] Usher and [?] Skinner are the medical officers now on duty."

Another note on the first hospital was made in 1906 when the assistant surgeon requested that a drop-light be installed in the ward "to facilitate reading and writing in the evenings, the lights in the chandeliers being at too great a distance from the table."

After the new hospital, required because of the expanded garrison, was built in 1913, the post commander moved his offices from the too-small administration building into the first hospital. The first hospital building has been demolished.

Second Hospital, Army No. 62

Stone building. Construction began as early as 1909, but the building was not completed until the winter of 1912-13. Cost, $49,020. It apparently had its own annex, which the Army referred to as the "New Hospital Annex" and which cost $17,981. Not much evidence exists concerning this annex; it is tenatively thought to be the structure at the rear of the new hospital and attached to it, as shown on late maps of the post. Building was demolished in 1965, being the only stone structure to have suffered that fate.

Hospital Morgue, Army No. 69

This small building, located near the first hospital, was built about 1898 at a cost of $405. It had two rooms; either each of them was 12'3" by 12'6", or the whole structure had these dimensions. Shingle roof. Despite persistent rumors, this building has been demolished. Date of demolition unknown.

Camp Sheridan Barracks, Army No. 1

Built 1886. Frame. Foundations, wood posts. Dimensions: 24'3" by 130', with a wing 28' by 56'3", making a T-shaped building. Cost, $1,300. The Army did not plan to use it as a barracks after Ft. Yellowstone was founded. But when the permanent garrison was enlarged to two troops before a second permanent barracks was built, the additional troops lived in these quarters during the winter months.

Once that problem was resolved, the structure became a quartermaster storehouse. In 1899 it was being used as an ordnance storehouse and was reported to be in fair condition, if too small. Electricity was installed in the building

sometime between 1905 and 1910. The structure was torn down by the Army in 1915.

(A second enlisted men's quarters at Camp Sheridan, Army No. 14, has been noted. But nothing other than that is known about the structure. It has not been identified on any maps. Whatever it was, it was still standing when the Army turned the military buildings over to Interior in 1916.)

Camp Sheridan Warehouse, Army No. 2

Built in 1886 at a cost of $600. Frame building, 24'4" by 100'. After Fort Yellowstone was built, this structure remained in use as a quartermaster storehouse. Electricity was added between 1905 and 1910. Demolished.

Camp Sheridan Guard House, Army No. 3

Frame. Built in 1886 at a cost of $100. Dimensions, 20 by 26 feet. When Fort Yellowstone was built in 1891, the U. S. Engineer Officer got permission to use this building for his operations. Still later it was used as quarters by packers. Electricity was installed sometime between 1905 and 1910. When used as packers' quarters, it housed five packers. Demolished.

Camp Sheridan Troop Stables, Army No. 4

Cavalry stables, built in 1886 at a cost of $900. Dimensions, 26'4" by 149'. Reported in 1899 as being in a dilapidated condition. In later years it was used as the pack train stables--56 animals. It acquired electricity sometime between 1905 and 1910. Demolished in 1915.

Camp Sheridan Quartermaster Stables, Army No. 5

Built in 1886 at a cost of $500. Dimensions, 39'8" by 50'6". When Fort Yellowstone was built, the U. S. Engineer Officer got permission to use this building for his operations. Apparently, the quartermaster was using this building, again, by 1899. At that time, the post commander complained about the distance between it and Fort Yellowstone--difficult to maintain control. At some point between 1905 and 1910, this building was used as the QM Veterinarian Hospital, with a capacity of 9 animals. Electricity was installed. Demolished.

Camp Sheridan Hospital, Army No. 6

Other than its existence and location, as shown on maps, nothing is known about this structure. Demolished.

Camp Sheridan Office Building, Army No. 7

Built in 1887 at a cost of $500. Frame. Dimensions, 26'6" by 36', with a wing, 13'4" by 20'.

At first Captain Harris had his office in an old blacksmith shop remaining from Superintendent Norris' day. Eventually Harris received $500 from the QMG with which to build this office. This structure no longer stands, but it may be considered to have been the first post headquarters.

When Fort Yellowstone was built in 1891, the U. S. Engineer Officer got permission to use this building for his operations. Later, at least after 1909, a blacksmith occupied this structure as quarters. It was still standing when the Army turned structures over to Interior. Demolished.

Camp Sheridan Officers Quarters, Army No. 8

Built in 1887 at a cost of $2,652. Frame. Two stories, 28' by 28'6", with a wing 22' by 22'6". A double set of quarters. When the structure was turned over to the Interior Department in 1916, it was then occupied by a wheelwright and a plumber (both probably Army employees). Demolished.

Camp Sheridan Magazine, Army No. 9

Stone walls, shingle roof. Date of construction is unknown. Dimensions 12'4" by 14'. This structure continued to serve as the magazine for Fort Yellowstone. Capacity, 1,000 cu. ft. Demolished.

Camp Sheridan Amusement Room

Little is known about the structure. Apparently, it was a mixture of PX and day room. Demolished.

First Powerhouse, Army No. 40

Located on the south side of Capitol Hill. Aubrey L. Haines has described this structure as having two stories, generators below and quarters for the operator above. Cost, $2,455.

Chittenden wrote in 1902: "An electric light plant has been installed under the joint contribution of the Quartermaster and Engineer Departments." He said that the plant consisted of "two 4-foot Pelton water wheels; two 50-K. W. Westinghouse generators; eighty 32-c.p. incandescent lamps for lighting the grounds; the necessary 16 c.p. lamps for interior lighting of Government buildings and a 30-horse power motor for power to be used in the [Engineer] shop pertaining to improvement work." In his opinion it was "a neat and commodious power house." It too had to be replaced by a larger plant after the post expanded to a full squadron. Demolished.

Quartermaster Stables, Army No. 44

Contract let in Sept. 1904 to Alexander Lyall for $11,589. At the same time, Hurley & Co. won the plumbing contract for this building--$3,208. Capacity was 76 animals and 25,000 cu. ft. of storage. Demolished.

Quartermaster Teamsters Quarters, Army No. 37

Contract was let in 1900 to Alexander Lyall, $2,715. Its capacity in 1909 was 14 men. Demolished.

Quartermaster Wagon Shed, Army No. 43

Contract was won in 1903 by Alexander Lyall for $2,647. However, when the Army turned the structure over to the Department of the Interior in 1916, it valued the building at $1,429. Its capacity in 1909 was 15 wagons. Demolished.

Quartermaster Wagon Shed, Army No. 46

Date of construction is unknown, but it probably close to 1904. Capacity in 1909 was 15 wagons. Demolished.

Quartermaster Dept. Residence

In 1908, General Young authorized the Construction Quartermaster, Capt. J. C. Castner, to construct a residence on Avenue E, between a U. S. Engineer cottage then being built (below) and a War Department house then occupied by Dr. Steele, Veterinarian.

This house was to be used to house Earl D. Covell, civil engineer and superintendent of construction at the post. The location of this structure and its neighbors has not yet been determined. It is thought that it was located along the road somewhere between the U. S. Commissioner's building and Camp Sheridan. A 1909 map shows a structure identified as "gov. employee's residences" and given the number "1." This may be either of the two buildings mentioned herein. Demolished.

Interior Department Cottage

Built ca. 1884-85, probably by one of the civilian superintendents before Army days. (The civilian superintendents during that period were Patrick H. Conger, Robert E. Carpenter, and David W. Wear.) It was located north of later Camp Sheridan and west of the Mammoth-Norris road. It was identified on a 1905 map as the scout's residence.

In 1908, the Interior Department's clerk, Chester Lindsley, had to give up the spare officers quarters in which he had been living, due to the expansion of the fort and the complaint of a junior officer who felt that he deserved better quarters than he had. Lindsley moved into this house, which was already occupied by a scout named McBride. (Apparently the house was a duplex, or adaptable to same.) At that time the building needed a new roof, plaster, paint, paper, and water connections. The post commander described it as being "a frame cottage a story and a half high containing eight small rooms, records of office do not show when it was built, but am informed by old residents that it was built in 1884-5."

In 1916, before the Army left the park, the interior of this structure was redone. Lindsley and the Chief Scout and their families still occupied the building. It was then described as having: kitchen, 12x14x8'; parlor, 19x15x8'; 2 connecting bedrooms, 15x12x7' and 15x6 2/3x7'; attic used as bath and storeroom, 12x20x4 and 8'; and a sitting room, 17½x10x7½'. The remodeling involved calcamining and papering the walls, and painting the ceilings and trim. Altogether, 145 sq. yds. of calcimining, 182 sq. yds. of papering, and 898 sq. ft. of painting were carried out.

U. S. Engineer Cottage (1908)

In a 1908 letter, General Young referred to a new cottage then being built by the U. S. Engineer Department. He said that this building was located on Avenue E. Some place near it was a War Department house then occupied by Dr. Steele, Veterinarian, U. S. Army. (See Quartermaster Dept. Residence, above, for a similar description). A good map of the area prepared in 1909 shows a building on Avenue E that is identified only as "Gov. Employee's Residence;" one may not be certain as to whose residence it may have been. Demolished.

U. S. Engineer Shed

Built by Chittenden, 1902. 100 by 20 feet. Demolished.

U. S. Engineer Shed

Built by Chittenden, 1902. 200 by 20 feet. Demolished.

U. S. Engineer Stable

Built by Chittenden, 1902. 40 by 30 feet. Demolished.

U. S. Engineer Bunkhouse

Built by Chittenden, 1902. 40 by 30 feet. Demolished.

U. S. Engineer Commissary and Storehouse

Built by Chittenden, 1902. 100 by 24 feet, one story. Demolished.

U. S. Engineer Shop

Built by Chittenden, 1902. 80 by 24 feet. Two stories, upper floor used as quarters. Demolished.

U. S. Engineer Storage Barn

Built in 1908. In 1913, a chimney was added. Demolished.

U. S. Engineer Wagon Shed

In June 1915, this structure was reported as being 75% complete. Demolished.

Ice House

Located near the new reservoir. Some maps show this as three separate structures, but most maps show it as one building. When the Army turned its buildings over to Interior in 1916, it listed the ice house under Camp Sheridan, giving it the number "11." Demolished.

Shooting Gallery, Army No. 45

Constructed in 1905 at a cost of $1,557. At that time the post commander requested 500 lbs. of white lead with which to paint it. Volume of structure, 34,000 cu. ft. Demolished.

Coal Shed, Army No. 32

Built in 1899 at a cost of $400. Reported in 1908 as having a capacity of 250,000 lbs. Demolished.

Buffalo Keeper's Cottage

Built in 1902, about one mile south of Ft. Yellowstone. That year the wild game corral (zoo) was removed from the parade and a new corral was built near the cottage. In 1908, after the buffalo keeper moved to Lamar Valley, two scouts, Graham and Wilson, both bachelors, lived in the cabin. Demolished in 1936.

Hay Shed, Army No. 25

Probably built about 1897. Cost, $1,311. Reported in 1908 as being able to store 300,000 lbs. of hay and straw. Demolished.

Cavalry Barracks, Army No. 5

First set of barracks erected at Fort Yellowstone--1891. Cost, $13,190. At first it had a capacity of 68 men. In 1909, a basement was constructed under one wing, and the kitchen, dining room, and lavatory were moved into it. Their former location was then converted into a dormitory, thus increasing the barracks' capacity to 100 men. Demolished. Area now used as a vehicle park.

Root House, Army No. 13

Completed in 1891 at a cost of $76. Dimensions, 12 by 26 feet. Made of logs, and dug into foot of Capitol Hill. Probably an earth roof.

Root House, Army No. 24

Frame, with earth roof. Also dug into foot of Capitol Hill. Dimensions, 24 by 50 feet. Demolished 1915.

Commissary Root Cellar, Army No. 56

Built about 1909 at a cost of $2,499. Built into base of Capitol Hill and larger than No. 24, above.

Ordnance Dugout

In 1909, an inspector general reported that the ordnance storehouse, located at the eastern edge of Capitol Hill, was of a "dugout order" and was "unsightly and unsuitable." It is likely that this was either No. 13 or No. 24, above, one or both being abandoned as a root cellar in favor of the new root cellar, No. 56, above.

Toilets

When Fort Yellowstone was founded in 1891, plans were drawn up for dry-earth closets for each officers quarters, NCSO quarters, and the barracks. The closets for the officers quarters each had two rooms and a total of 3 seats. There was also a passageway behind the rooms for the scavenger. The dry earth closet for the barracks had seven seats and the scavenger could drive through the rear part. It also had a vestibule and a "dry earth reservoir."

Apparently a sewage system of some nature was completed as early as 1892. Before long, exact date unknown, interior flush toilets were installed in all dwelling units. In 1904, the post commander commented that the servants in the officers quarters were without dry-earth closets. He said that pits had been dug for them in 1903 and they were still satisfactory. These pit toilets could not be converted to flush toilets because they would freeze.

In 1906, plans were prepared to build servants' bathrooms on the back porches of the officers quarters. Major Pitcher argued against this because, he said, the porches were too frail and they were so high off the ground that the pipes would freeze. He preferred a small house be built at the rear of each of four double sets of quarters. It would be interesting to know how this "hang-up" was resolved.

U. S. Weather Bureau

Completed in 1903. Frame, two stories. Major Pitcher described it as "handsome;" the Army described it as "Colonial."

Fuel Sheds

A list of structures drawn up at the end of 1896 showed 7 fuel sheds for the various dwelling units at the post. Each cost $71. In 1916, the Army turned four of these sheds over to Interior. All have been removed.

Fire Engine House

Apparently built late in Ft. Yellowstone's history. Location unknown.

"Hook and Ladder" House

Also apparently built late in Ft. Yellowstone's history. Location unknown.

Commanding Officer's Stable, Army No. 84

This was a small frame "shack" put up early in Fort Yellowstone's history as a stable for the commanding officer, and perhaps for other officers. It was still standing when the Army turned the fort structures over to Interior in 1916.

Tennis Courts, Army and Hotel

At one time the Mammoth Hot Springs hotel had two tennis courts on the plateau in front of the hotel. About the same time, a third court stood in front of officers row. These courts show on some, but not all, of the historic maps of the area.

C. Highlights from the Social History of Fort Yellowstone

In the course of collecting information concerning the structural history of Fort Yellowstone, some notes on the social history of the post came into hand. In some instances this information has a direct bearing on the structural history, e.g. the personality of the commanding officer; in other instances the information is incidental, but it is of interest in the human history of the establishment.

This chapter should by no means be considered a history of the people of Fort Yellowstone. Such a study would exceed in time and money that programmed. Also, Aubrey L. Haines has dealt with this subject in his study, "The Yellowstone Story." The important story of the Army's duties throughout the park is not discussed at all in that which follows.

In many ways, Fort Yellowstone was a typical army post. Founded when the Indian wars had at last come to a close, it witnessed the transitions that occurred as the Army emerged from its frontier isolation to fight the Spanish-American War in Cuba and the Philippine Islands, to be sent overseas in increasing numbers as the United States enlarged its role as a world power, and, at the end of the post's existence, to fight in France in World War I. When the Army came to Yellowstone, the most advanced means of transportation was the cavalry horse. Before the Army left the park, a soldier printed in large letters in the headquarters register that AUTOMOBILES were allowed (1915).

The troops pulled quard duty, kitchen police, target practice, and patrols (both mounted and skiis). Reveille and retreat, stable call and inspections, all followed one another in the same sequence as at other posts of the period.

In other ways, Fort Yellowstone was not at all typical. Its basic function was to administer and protect a national park, a far cry from a cavalry charge. Soldiers found themselves pursuing poachers, fighting forest fires, and interpreting the wonders of nature to pretty maidens. Those officers assigned to the dual positions of post commander and acting superintendent found themselves on the horns of a dilemma. The nature of the responsibilities forbade the training of their men in the arts of war. Dispersed over the park in small detachments during the summer and snowbound at Mammoth during the winter, the troops could only rarely partake in drill, maneuvers, target practice, training marches, and other aspects of their profession. This

situation caused constant worry to the officers whose raison d'être was to soldier and to lead soldiers. Nonetheless, the officers selected for duty at Fort Yellowstone did, to a remarkable degree, perform their strange duties with dedication and perseverance. Today's specialists in area management could not be blamed if they looked back upon some of the policies and procedures of the army period a little aghast. But it is also true that many of today's guidelines were first forged by the men in blue who learned by trial and error at a time when there were few waysigns to follow.

Post Commanders and Acting Superintendents

(This list does not include officers who acted in these positions when the commanding officer was absent from the post.)

Capt. Moses Harris, 5th Cavalry, Aug. 20, 1886-May 31, 1889.
Capt. Frazier A. Boutelle, 1st Cavalry, June 1, 1889-Feb. 14, 1890.
(Boutelle actually left Dec. 19, 1889. During the interim an infantry officer, 1st Lt. John McMartin, 25th Infantry, was incharge for two weeks--the only infantryman to do so.)
Capt George S. Anderson, 6th Cavalry, Feb. 15, 1891-ca. June 22, 1897.
Col. S. B. M. Young, 3d Cavalry, June 23, 1897-May 18, 1898.
(Actually left park in Nov. 1897.)
Capt. James B. Erwin, 4th Cavalry, May 19, 1898-May 27, 1899.
Capt. Wilbur E. Wilder, 4th Cavalry, May 28, 1899-June 22, 1899.
Capt. Oscar J. Brown, 1st Cavalry, June 23, 1899-July 23, 1900.
Capt. George W. Goode, 1st Cavalry, July 24, 1900-May 7, 1901.
Capt. John Pitcher, 1st Cavalry, May 8, 1901-May 13, 1907.
(Pitcher was promoted to major, Jan. 1902.)

Acting Superintendent (only)

Lt. Gen. S. B. M. Young, Retired, May 14, 1907-Oct. 27, 1908

Post Commander (only)

Maj. John Pitcher, 1st Cavalry, May 14, 1907-July 1907.
Maj. Henry T. Allen, 8th Cavalry, July 1907-Oct. 27, 1908.

Post Commander and Acting Superintendent

Maj. Henry T. Allen, 8th Cavalry, Oct. 28, 1908-Nov. 20, 1908.
Maj. Harry C. Benson, 5th Cavalry, Nov. 21, 1908-Sept. 29, 1910.
Maj. Lloyd M. Brett, 1st Cavalry, Sept. 30, 1910-Oct. 26, 1916.

Maj. Edmund M. Leary, 7th Cavalry, July 1, 1917-1918.
(Post returns not available for 1917-18.)

Army Units Stationed in Park

(Permanently or on summer duty. List does not include units that passed through park on training marches.)

1st Cavalry--Troops A, E, F, G, H, K, and M, and Machine Gun Platoon of Second Squadron.
3d Cavalry --Troops A, B, C, D, and F.
4th Cavalry--Troops D and H.
5th Cavalry--Troops E. F, and G.
6th Cavalry--Troops D, I, and K.
7th Cavalry--Troops unknown.
8th Cavalry--Troops E, F, G, and H.
13th Cavalry--Troops A and C.
Cavalry Troop 1 (Provisional)
Cavalry Troop 2 (Provisional)
22d Infantry--Detachment from several companies.

Personalities

Capt. Moses Harris

A native of New Hampshire, Harris joined the Army as a private in 1857. He was commissioned a second lieutenant in tne regular army cavalry in 1864. For battle-actions in the Civil War he was breveted to captain (1864) and awarded the Medal of Honor (1896). He retired from the Army witn the rank of major in 1893.

Although he lacked authority to prosecute law-breakers in Yellowstone, Harris determinedly pursued poachers, removed them from the park, and confiscated their equipment. He had his men make patrols both summer and winter. G. L. Henderson, who had been an assistant superintendent during the civil administration, described Harris' regime: "It was marked by a vigor and wisdom that made him the terror of vandals, skin hunters and evil doers."

During Harris' superintendency, the first winter ski patrol was made through the park. The patrol covered about 200 miles. Lt. Frederick Schwatka, already famous as an arctic explorer, led the patrol. Unfortunately he became ill at Norris and was unable to complete it. Under Harris, too, the first incident of catching and punishing a poacher occurred when Scout Ed Wilson caught William James trapping beaver. Harris had James expelled from the park.

Harris' administration successfully made the transition from civilian to military control, despite considerable resentment from citizens living in the vicinity of the park. His command took the first steps in developing techniques for protecting natural resources--a new assignment for the military. Chittenden wrote of Harris: "Vigorous and uncompromising in suppressing lawlessness, just and impartial in his rulings, and untiring in his watchfulness for the public interest."[1]

Capt. Frazier A. Boutelle

Born in New York, Boutelle joined a New York cavalry regiment as an enlisted man during the Civil War. He was later commissioned and, by 1865, was a captain. Following the war, he joined the regular army as a private in the 1st Cavalry. He rose to the position of sergeant major. He was commissioned in the 1st Cavalry in 1869. As a lieutenant, he took part in the opening battle of the Modoc War at Lost River, Oregon, in 1872. Promoted to captain in 1886, he retired in 1895.

A somewhat pompous and impatient man, Boutelle failed to get along with the Secretary of the Interior, John W. Noble. The Secretary considered Boutelle to be "troublesome." Chittenden summarized Boutelle's career in Yellowstone: "That the evil of political interference and private intriguing was not yet wholly eliminated . . . became manifest when Captain Boutelle undertook to enforce the regulations against a prominent employee of the hotel company. For causes not publicly understood, he was unexpectedly relieved from duty." Before Boutelle left Yellowstone, the decision had been made to replace Camp Sheridan with a permanent post. Boutelle had the pleasure of making the tentative selection of the site.[2]

Capt. George S. Anderson

Anderson graduated from West Point in 1871, ranking fifth in his class. Joining the 6th Cavalry, he was still with that unit when he arrived in Yellowstone. He took part in the Spanish-American War and by 1901 was colonel of the 8th Cavalry.

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1. Heitman, 1, 503-04; Hampton, pp. 9-11; Chittenden, p. 138; Lindsley, pp. 119 and 124.

2. Heitman, 1, 233; Chittenden, p. 139; Hampton, pp. 12-13.

Acting Superintendent of Yellowstone for six years, he was one of the very best officers to hold this position. But not everyone thought so at first. An unidentified newspaper reporter wrote that Anderson was"the offensive impersonation of a puffed-up subordinate." He added: "This uniformed fool seems to fancy that no tourist has seen the real wonder of the park unless he has looked upon Captain Anderson," "a titled ass." But he had his supporters in the press too: "distinguished executive ability," "great geniality," "a[n] ideal looking soldier, broad shouldered and over six feet tall," and a "bronzed face."

Among Anderson's contributions was the founding of Fort Yellowstone, still a one-troop post when he left the park. He argued incessantly for a larger complement of troops, which eventually came to happen. Perhaps the most significant event of his command was the capture by a ski patrol of Edgar Howell, who was caught red-handed killing buffalo. Anderson was quick to use this incident as an argument for a law prohibiting the killing of animals in a national park. Aided by national publicity, largely by Emerson Hough and George Bird Grinnell (Forest and Stream), this idea bore fruit when Congress passed such a law in 1894 (the so-called Lacey Act). A U. S. Commissioner was appointed to Yellowstone and, for the first time, lawbreakers could be arrested, tried, and punished.

Complaints about Anderson continued to appear in the press: "A man . . . who is frequently found with a gigantic jag aboard." But these seem to have originated among people who had felt his wrath over some infraction of the rules. Chester Lindsley, whose observations were as acute as anyone's wrote that Anderson was a square-thinker, a "brilliant mind, quick and almost infallible in decision."

Anderson also possessed intellectual interests. He is given credit for establishing a reference library at Mammoth, the forerunner of today's research library. It is possible that the several newspaper clippings concerning him in this account, including the negative ones, were collected in scrapbooks by Anderson himself.

When he left Yellowstone in 1897, friends of the park felt a genuine regret:

> When Captain Anderson took charge, the way had in some measure been paved for his administration by the previous military superintendents, Major Harris and Captain Boutelle; yet, after all, only a beginning had been made. What was needed there then was a strong man, cool, firm and clear-headed, accustomed to dealing with men, devoted to his duty, and with a keen enthusiasm for his work.
>
> Anderson was that man.[3]

Col. (Lt. Gen.) S. B. M. Young

A native of Pennsylvania, Young entered the military service as a private in 1861. By the end of the Civil War, at age 25, he had reached the grade of colonel and brevet brigadier general. He entered the regular army as a second lieutenant in 1866 and began the slow climb up the ladder, becoming the colonel of the 3d Cavalry just before arriving at Yellowstone on his first tour as acting superintendent in 1891. Later he took part in the invasion of Cuba and the campaign against the Philippine insurrectionists. Other positions that he held included military governor of northwestern Luzon, commander of the Department of California, first president of the Army War College Board, and, finally, lieutenant general and first modern chief of staff of the United States Army. He retired in 1904 and, in 1907, returned to Yellowstone for his second tour as acting superintendent.

Little needs to be said concerning his first tour at Yellowstone. He was assigned to the park for only eleven months, and spent a considerable portion of that time on leave or detailed service elsewhere. His second tour, 17 months, marked a premature effort

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3. Heitman, 1, 163; Yellowstone Library, Scrapbook no. 463, unidentified clipping, "Captain Anderson and the Park," possibly from Forest and Stream; Scrapbook no. 4208, unidentified clipping, "More Park Complaints," possibly from the Bozeman Standard; unidentified clipping, "A Strict Watch Constantly Necessary to Preserve Game; unidentified clipping; "A Visit to Yellowstone National Park," clipping from the Livingston Post, "Affairs in the National Park Controlled by a Drunken Soldier"; Annual Report of the Secretary of the Interior (1891), p. 641; (1892), p. 647; (1893), p. 618; (1896), p. 719; Hampton, pp. 14-15; Lindsley, pp. 148 and 157; Campbell, p. 59; Russell, p. 6; Anderson, pp. 5 and 10.

to divest the Army of its administration of national parks. It may seem strange that the Army's highest ranking officer, even if retired, would accept the position of acting superintendent. That he did so was primarily because of President Theodore Roosevelt.

Young wrote to his successor as chief of staff, Maj. Gen. J. F. Bell: "I may say to you confidentially, I was asked by the President to come here for the accomplishment of certain purposes. Some of these have been accomplished, and . . . all will . . . be completed during the next season." Apparently, some of these "certain purposes" were simply measures to manage the park with less friction between armed soldier and civilian tourist. But, more importantly, Roosevelt had come to a conclusion that the national parks should be returned to civil control. Young's major task was to investigate this matter and devise a plan.

He quickly concluded that soldiers did not make good guardians: "Two years' experience in governing the park with troops . . . leaves no doubt in my mind about the superiority of a trained and well-governed civil guard for this particular and difficult duty." He was supported in this by a friend from Helena, Mont., John H. Raftery. In fact, Raftery wrote an essay on the matter that Young included in an annual report. Raftery (and Young) concluded that officers could not be good superintendents because their appointments were too short to get well acquainted with the park, they knew when they got the appointment that it was not to be permanent, and their soldiers were also unfamiliar with the park thus prohibiting the officers from doing well. As for the enlisted men, an "assignment to Fort Yellowstone means only change of post; he soon learns the grand tour and how to cut a dash on the parkways and finished drives; he is a fine figure in a fine setting, but he neither knows or cares where the changing chances of his soldiery may take him any day."

Young prepared an elaborate plan for staffing the park with civilian employees. He called this "The Yellowstone National Park Guard." Under a superintendent (himself), would be a chief inspector, four assistant inspectors, 20 guards, and 15 seasonal guards, plus an assortment of clerks, buffalo keepers, telephone line men, etc. He forwarded this plan in his annual report, Oct. 15, 1907.

In December, Young wrote to Secretary of the Interior James R. Garfield: "I have your kind letter of December 18 showing necessity of continuing the present method of using troops in the park and the President's letter on the same subject." That was that. From then on Young supported the use of troops and urged expansion of the garrison from two troops to four, and that the troops be given foreign service pay.

Young's role as acting superintendent brought about certain minor adminstrative problems at Fort Yellowstone. Being retired he could not wear the other hat of post commander; that position continued to be held by the ranking officer of the garrison. Such a duality had a potential for conflict. Young, however, made a valiant effort to get along with the post commanders, and the problem never became serious. Because of his status, he was not entitled to quarters at the fort. Consequently he rented rooms at the Mammoth Hot Springs Hotel. On the other hand, he did not cost the Army any money. His "salary" was his retirement pay. As he put it: "My work is simply a labor of love." Love was indeed on Widower Young's mind. At this time he met and married the widow of Silas S. Huntley, the late general manager of the Yellowstone Park Transportation Company.

Sometime after he left Yellowstone, General Young wrote to President Roosevelt summarizing, with a touch of disappointment, his second tour of duty:

> I am conscious that my efforts to improve the park administration have been only in a measure successful, but I indulge the hope that by the adoption of the recommendations it has been my privilege to make and such other recommendations as enlightened management may suggest in the future the Yellowstone Park will in due time become a genuine pleasure ground . . . free from annoyance and needless restraints.[4]

Maj. Wilbur E. Wilder

A graduate of the United States Military Academy and a colonel of Volunteers in the war against Spain, Wilder was commanding officer of Fort Yellowstone too briefly to make an impact on it. His sudden departure from the park was caused by his unit receiving orders to go to the Philippine Islands. He is mentioned here because

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4. Heitman, 1, 1067; Annual Report of the Secretary of War, 1907, p. 554; Yell. Archives, Letters Sent, 17, Apr.-Oct., 1907, Young, Oct. 15, 1907, annual report; 18, 1907-08, Young, Dec. 20, 1907, to Sect. of the Interior; Special Military Reserve, 34, Young, Jan. 31, 1908, to Maj. Gen. J. F. Bell; Letters Sent, 18, 1907-08, Young, Jan. 21, 1908, to Maj. A. M. Fuller; U. S. Senate, 60th Cong., 2d Sess., Doc. no. 752, "Historical and Descriptive Sketch of Yellowstone," transmitted to the President by Young, Jan. 15, 1909; John H. Raftery, The Story of the Yellowstone (Butte, 1912), pp. 8-10; Lindsley, pp. 195-96; Hampton, p. 17.

he was the second post commander to have won the Medal of Honor--at Horseshoe Canyon, New Mexico, 1882.[5]

Maj. John Pitcher

Born in Texas, Pitcher graduated from West Point in 1876. He arrived at Fort Yellowstone as a captain and while there received his promotion to major. (He had been to Yellowstone in the summer of 1891 with Troop E, 1st Cavalry, on detailed service.) Like Anderson, he served as acting superintendent for six years. Under him, and with the assistance of Captain Chittenden, Fort Yellowstone became the handsome post it had long promised to be.

Pitcher argued forcibly for the expansion of the permanent garrison to a full squadron (4 troops) of cavalry and for the doubling of the barracks, stables, and quarters. He succeeded on these counts, although the actual construction and expansion would come after his transfer.

In 1903, Pitcher gained some national prominence when President Roosevelt visited Yellowstone. Many of the photographs published showed him greeting, escorting, and saying farewell to the President. Pitcher entertained the chief executive in his quarters; but which building was his residence remains unknown.[6]

Maj. Harry C. Benson

Benson was born in Ohio. He graduated from the USMA in 1882, ranking seventh in his class. After a brief fling with the artillery, he transferred to the cavalry. He served as an inspector general of Volunteers during the Spanish-American War. In 1907, General Young wrote of him: "Major Benson was my right hand man when I was Superintendent of the Yosemite Park in 1906. He is full of energy, thoroughly loyal and conscientious in his work and highly capable. He is the officer I have in mind to recommend, in due

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5. Heitman, 1, 1035.

6. Heitman, 1, 793; Annual Report of the Depatment of the Interior (1904), pp. 501-02; (1904), p. 361; (1905), pp. 670-71; Yell. Archives, 143, Journal of the Acting Superintendent, Apr. 8 and 24, 1903; Yell. Library, Book of Clippings, no. 454, clippings from the San Francisco Call, Apr. 9, 1903; Anaconda Standard, Apr. 24, 1903; Washington Star, Apr. 25, 1903; and New York Commercial Advertiser, May 2, 1903.

time, as my successor here [Yellowstone]." Fort Yellowstone acquired its stone quarters, barracks and stables during Benson's administration.[7]

Maj. Lloyd M. Brett

Another graduate of West Point (1879), Major Brett was the third of Yellowstone's acting superintendents to hold the Medal of Honor. He had won his at O'Fallons Creek, Mont., in 1880. During the war with Spain, he served in the U. S. Volunteer Infantry (lt. col.), otherwise he remained loyal to the cavalry. Under his administration Fort Yellowstone acquired a stone chapel and a new stone hospital.

Toward the end of the army period, the number of troops decreased and were finally reorganized into two provisional troops. A number of these men gave up their army careers in 1916, and took employment with the Interior Department as rangers in the park. Major Brett had the duty on October 26, 1916, to close the books on Fort Yellowstone, when it was abandoned as a military post.[8]

Second Lt. Jonathan M. Wainwright

Many of the younger officers at Fort Yellowstone should be noted, but attention will be restricted to 2d Lt. Jonathan M. Wainwright, Troop F, 1st Cavalry. Wainwright, assigned to Brett's command, arrived at Fort Yellowstone October 10, 1910. He was born at Fort Walla Walla, Wash., the son of an army officer. He graduated from the U. S. Military Academy in 1906. Like his fellow officers, he had many additional duties at Fort Yellowstone: Ordnance Officer, Signal Officer, Post Engineer Officer, Range Officer, and Athletic Officer. He was also given command of the Machine Gun Platoon, 2d Squadron, 1st Cavalry. True, this was not a large command (8 enlisted men present for duty in September 1910), but it was all his. During the winter of 1910-11, his men were split up among the four troops at the post. In the spring of 1911, he took them to the Snake River Station where they spent that summer and the next patrolling and constructing telephone lines.

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7. Heitman, 1, 212; Yell. Archives, Letters Sent, 18, 1907-08, Young, Nov. 20, 1907, to Sect. of War; Lindsley, p. 201.

8. Heitman, 1, 243; Lindsley, pp. 204-05 and 207-08.

Wainwright's tour at Yellowstone was ordinary in character. In the spring of 1911 he took some leave. That fall he was reported as being sick in quarters for two days. In March 1912, he traveled to Fort Riley, Kansas, to take promotion examinations. That August he became a first lieutenant and transferred to the 15th Cavalry. He left Fort Yellowstone September 19 en route to the Mounted Service School.

Thirty years later, 1942, Wainwright's name was a household word throughout the land. When Douglas MacArthur left the Philippines to establish his headquarters in Australia, Wainwright succeeded him as commander. On May 6, he swallowed his bitter pill and surrundered Corregidor to the Japanese. For over three years, the Japanese held him as a prisoner of war in Manchuria. In 1945, he returned to America, considered by his countrymen to be a hero.[9]

Hiram M. Chittenden

Much has already been said on Major Chittenden, U. S. Engineer Officer. Like Young, he had two tours of duty in Yellowstone, these coinciding with two of the better acting superintendents, George Anderson and John Pitcher. In contrast to some of the other Engineer Officers assigned to the park, Chittenden had the ability to work with the administration. Occasionally, minor problems cropped up, but Chittenden was more concerned with accomplishing his mission than with feuding.

At the beginning of his work, 1891, he found that his first task was to bring some planning, energy, and organization to the engineer department. His major problems were his superior officer and his subordinate clerk, who were allies in their jealousy of him and his competence.

His return to Yellowstone in 1899 was the result of pressure applied by citizens and politicians who had been impressed by his earlier work. The Chief of Engineers asked him if he would like to take complete charge of the park as acting superintendent. Chittenden declined, saying that he would like to be in charge of development only. He succeeded in persuading the U. S. Congress

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9. NA, Microcopy 671, Post Returns.

to "guarantee" an annual appropriation for the work, thus allowing him to undertake projects without waiting for the annual passing of the appropriations bill--usually well along in Yellowstone's short summer season.

The report has already dwelt on his work in improving the appearance of Mammoth Hot Springs and the building of the arch. An incident at the dedication of the arch was illustrative of Chittenden's character. Just a few days before the dedication, Chittenden received orders transferring him to the Philippine Islands. Word spread, finally reaching President Roosevelt, who was greatly impressed with Chittenden and his work. Roosevelt sent a letter to the Secretary of War directing him to cancel the transfer orders. When Chittenden heard of this he was greatly upset. He did not want to leave the park, but he thought that the presidential interference was quite improper. He sought a private meeting with Roosevelt, explaining his thoughts on the matter. Roosevelt agreed to withdraw the letter. (But he promptly got in touch with a general who had Chittenden's orders revoked.)

Chittenden not only made lasting contributions to the development of Yellowstone National Park, he became a noted historian of the American West. His first history, published in 1895, was Yellowstone National Park, Historical and Descriptive. This book, many editions and revisions later, is still in print. His most important work was The American Fur Trade in the Far West. This classic, two-volume study still bears a great influence among students of the fur trade, although more recent research has brought new information to light. Besides co-editing the papers of Father Pierre Jean de Smet (4 volumes), Chittenden wrote the also valuable History of Early Steamboat Navigation on the Missouri River, Life and Adventures of Joseph La Barge.

It is generally believed that because of his great interest in history that Chittenden encouraged, perhaps contributed to, the development of the research library at park headquarters. Such a subject is worthy of the attention of someone who has close and steady contract with today's library at park headquarters.

Chittenden believed thoroughly in the Army's role at Yellowstone. He wrote that "it is not probable that public opinion will ever sanction a return to the old [civil] order. The administrative machinery has completely adjusted itself to the present system." But then, he was a better historian than prophet.[10]

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10. LeRoy, pp. 13, 15-22, and 24-25; Russell, pp. 6-7; Chittenden, pp. 115 and 271.

Miscellaneous Events, from Post Returns, Acting Superintendents' Journal, and Correspondence

From 1886 to 1902 a woman (sometimes two) was employed in the post hospital as matron.

Feb. 1887. The transportation system at Camp Sheridan consisted of: 3 army wagons, 1 escort wagon, 1 spring wagon, 1 ambulance, and 22 mules.

Jan. 1891. This was the low point in the strength of the garrison--caused by the sudden transfer of Captain Boutelle. At the end of the month there were but one officer and seven enlisted men present for duty.

June 1891. "The hay corral at this post was destroyed by fire."

Dec. 1891. The NCSOs consisted of: Commissary Sergeant Henry Wilson, Quartermaster Sergeant George Eppert, and Hospital Steward William F. Hatfield. There was also a sergeant major--name unknown.

May 1892. Civilian employees working for the War Department were: 1 guide, 1 hospital matron, 1 blacksmith, 1 packer, 4 teamsters, and 1 scavenger. (Dept. of Interior employees were not listed on the post returns.)

May 1892. 2d Lt. Elmer Lindsley arrived at Fort Yellowstone. Many years later, his brother, Chester, would become the first post-Army superintendent.

July 1892. Weapons and ammunition at post: 69 rifles and carbines, 64 pistols, 1 field piece (a 12-pounder), 11,500 rounds for rifles and carbines, and 256 blanks for field piece.

May 1893. 5 enlisted men deserted; three of them were apprehended.

Nov. 1893. Pvt. John Crampton, Co. C, 20th Infantry, "on duty as Post School teacher." These enlisted school teachers, when available, taught both classes of enlisted men (in the evenings) and children of post families.

Dec. 1893. "Commencing Jany 1, '94, mail will be received tri-weekly Tuesdays and Thursdays by stage from Livingston, Mont. Saturdays by stage from Cinnabar, Mont."

May 1894. 2d Lt. Lumsford Daniel, I, 6th Cav., died 7:40 p.m., May 31, from inquiries received by being thrown from horse May 27, 11 p.m.

April 1894. Commissary Sgt. Henry Wilson transferred to Alcatraz Island; Commissary Sgt. Isidore Kalnues arrived from Fort McIntosh, Texas.

July 1894. Two officers and 34 men of Troop I, 6th Cavalry left Fort Yellowstone July 7 for Bozeman Tunnel, Muir, Mont. Arrived there July 8--73 miles. Returned to post July 31. Trip was in connection with protecting Northern Pacific Railroad property, making arrests, etc. (Railroad strike.)

July 1894. 2d Lt. Peter Murray, 3d Infantry, reported for duty, preparing maps. (He returned in summers of 1895 and 1896.)

Oct. 1896. Troop I, 6th Cavalry, on practice march, Oct. 10-22, 220 miles, to Cooke City. Returned via Yancey's, Mt. Washburn, Canyon, Upper and Lower Geyser Basins, and Norris.

Feb. 1897. The 25th Infantry Bicycle Corps (black soldiers) under 1st Lt. Moss, visited Fort Yellowstone from Fort Missoula, Mont. (1 officer, 1 sergeant, 1 corporal, 1 musician, and 5 privates.)

Aug. 1897. "Other" duties assigned to officers: Post treasurer, Superintendent of Schools, Signal Officer, Topography Officer, Officer in charge of Gardens, Superintendent of Gymnastics, Exchange Officer, Recruiting Officer, Range Officer, Commissary Officer, Ordnance Officer, Quartermaster, and Post Adjutant.

Aug. 1899. Census of post families:

Officers	EM	Civilians	Servants
4 adult males	8 adult males	13 adult males	1 adult male
3 children males	7 children males	2 children males	1 child male
4 adult females	7 adult females	5 adult females	3 adult females
6 children females	9 children females	2 children females	

Oct. 1902. Civilian employees: 1 clerk, 1 mechanical engineer, 1 guide, 1 plumber, 1 wheelwright, 1 blacksmith, 2 packers, and 6 teamsters.

Apr. 1903. "The President of the United States, Mr. Roosevelt arrived at the Post April 8th and remained in the Park until April 24th, leaving the Post at 3 p.m. that day."

June 1903. NCSOs: Commissary Sgt. John Brown, Quartermaster Sgt. John Delmar, 1st Class Signal Sgt. Harry W. Chadwick, Hospital Sergeant Alvin R. Palmer.

Sept. 1902. "No full dress uniform has ever been issued to troops at this post, and it was my impression that the band was to be used only with full dress. It will be issued and worn as required in the future."

July 1904. Lt. Gen. A. R. Chaffee, Chief of Staff, U. S. Army, arrived on tour of inspection, accompanied by QM General Humphrey.

July 1904. Brig. Gen. C. C. C. Carr, CG, Department of Dakota, arrived on tour of inspection.

July 1904. Headquarters, Band, and 1st Battalion, 24th Infantry (a Negro regiment), consisting of 10 officers and 225 enlisted men arrived at Fort Yellowstone July 29, on practice march from Ft. Harrison, Mont. Left post July 31.

Dec. 1904. "A very good foot ball team was organized after the return of the troops from the Park, and it is now absent at Fort Assiniboine."

Aug. 1905. Gen. C. C. C. Carr, CG, Dept. of Dakota, arrived on inspection.

Oct. 1906. "German silver badges" sent by Interior Dept. for the civilian employees of "the National Park service." (1 clerk, 4 scouts, and 1 buffalo keeper.)

Sept. 1907. Sect. of War William H. Taft, accompanied by Brig. Gen. C. R. Edwards, arrived to make tour of the park.

June 1908. Enlisted men cannot dress or undress in their barracks because of the tourists passing by. Forty window shades needed.

Sept. 1908. Maj. Gen. J. F. Bell, Chief of Staff, U. S. Army, arrived in park.

Feb. 1909. "An Indoor Athletic Meet was held in the Post Gymnasium, Feb. 25."

July 1909. Secretary of the Interior R. A. Ballinger arrived in park.

Sept. 1909. General Howe, CG, Dept. of Dakota, arrived in park for 5 days.

Nov. 1910. Dental Surgeon George S. Mason at work.

July 1911. "Building No. 50, North (Barracks of Troop H, 1st Cavalry) seriously injured by fire July 18, 1911."

Sept. 1913. The band left the post Sept. 15 for Presidio, Calif.

Jan. 1916. 2d Lt Joseph E. McDonald died from asphyxia, by being buried under a snow slide.

Oct. 1916. "Post officially abnadoned October 26, 1916."

D. Recommendations

The recommendations that follow are based solely on a historical perspective; they do not necessarily involve feasibility from an architectural point of view. They are included here for the consideration of and evaluation by historical architects as well as by management.

U. S. Engineer's Office, HS 39

This handsome stone structure is presently the office of the district ranger for the northern part of the park. Recommend that in long-range planning the interior lower floor of this building be restored to its original appearance. Capt. Hiram Chittenden designed this building to be an attractive, comfortable set of offices (quarters on second floor), with its stained woods, beamed ceilings, elegant fireplaces, etc. Also recommend in the long range that this building be used to house both the Yellowstone Archives and the Yellowstone Research Library, both now housed in less than than satisfactory quarters in HS 1, the bachelor officers quarters.

Chittenden gained for himself a high place among the historians of the West. His histories have stood the test of time and his influence on succeeding generations has been and continues to be great. No more fitting use of this building could be made than to have it become the research center for this first national park.

U.S. Commissioner's House

Although located relatively close to the terraces of the hot springs, this fine structure is one of the oldest (1894) and most historic structures now standing at Mammoth. Despite its modest infringement on the natural scene, recommend that it be retained on its original site. From a historical perspective, the removal of this building to a new site would in effect destroy much of the historical values that are associated with it.

Demolition of Historic Structures

Although some of the historic structures have been greatly altered over the years, the recommendation is made that all the historic structures be retained (some possible exceptions listed below), that in a long-range program they be eventually restored to their original exterior appearance, and that where necessary new functions be developed for them.

There are three historic structures that do not today contribute to the general historic scene. These are: HS 62, QM oil house, a small building located over the edge of the plateau and not in sight from the interpretive tour of the post; HS 22, quartermaster shops, a substandard structure which is now separated from the historic scene by a large apartment complex--it too is not in sight from the interpretive tour; and HS 2023, Mail Carrier's House (Hjelm House), an old structure that clashes with the Fort Yellowstone complex in a distracting manner.

Because these three do not contribute to the general historic scene, an argument for their eventual demolition could be made if and when their functional uses someday came to an end.

Reconstruction

From a historical perspective no recommendations for reconstruction of any former buildings are made at this time, including the Norris blockhouse, Camp Sheridan, outlying buildings, or on the military reservation itself.

Paint

It is recommended that the structures at Fort Yellowstone be repainted in the colors known to have been used by the Army, at least for that period after the stone buildings were erected in 1908-09. The walls of the frame structures were white; the roofs and trim were red. All visitors of that period who commented on the color scheme reacted favorably toward it. The red roofs on the frame buildings tied in with the red tile on the stone buildings. In the case of the specifications of the U. S. Engineer Office, the red and white paints are listed by brand names. (Note: The tile roof on this building was green, as probably were all the roofs of the Engineer Department.)

3. Architectural Data

A. The Fort Yellowstone Complex

1. Description of Historic Appearance and Conditions

Fort Yellowstone lies in the northwestern part of Yellowstone National Park, just east of the natural formation known as the "Mammoth Hot Springs," and approximately ten miles south of the town of Gardiner, Montana. The post proper originally existed within the boundaries shown on the accompanying historical maps (see appendix , maps 4 & 6), although there were a number of ancillary structures located outside these boundaries. The bulk of the structures, however, were located in the immediate vicinity, at the eastern edge of what is called the "Hotel Terrace." There also existed a number of concessioners' facilities immediately adjacent to the fort. This area generally comprises what is now commonly referred to as the "Mammoth Headquarters Area" of Yellowstone National Park.

Fort Yellowstone is actually the third generation of structures to serve as headquarters for Yellowstone Park. The first set of structures was constructed about 1878 by Philetus W. Norris, and consisted of a crude blockhouse on top of what is now known as "Captol Hill" and several temporary structures at its base, among which were a storage building and cookhouse, a barn, corrals, a henhouse, a blacksmith shop and sanitary facilities.

In 1886, these buildings (except for the blockhouse) were replaced by more substantial structures. Known as "Camp Sheridan," this second set of buildings served as park headquarters until 1891, when Fort Yellowstone was established. Although not within the boundaries of the new post, these structures continued to remain and to be used by the Army throughout most of its administration of the park, and were thus very much a part of the historic scene.

Fort Yellowstone was not a fortified post, having been established after the period of great western expansion and consequent Indian wars. In this respect, with the exception of the Norris blockhouse, it bore little resemblance to the barricaded posts so often depicted in western movies but in fact typical of very few. Its layout was not unlike a number of other forts established throughout the northwest, although these generally tended to be organized around a central parade

ground rather than to the side, as was the case here. Perhaps Fort Yellowstone's most unusual quality was its permanence. The lifetime of many western forts could often be measured in terms of months, or at best, only a handful of years, and their structures reflected their temporary nature. As a result, there is little or no trace remaining of many of these posts. Fort Yellowstone is one of the few military posts established in the late 19th century to retain most of its major buildings in their original appearance and location, and is typical enough of its kind to be exceptionally important in presenting this saga of United States history to the public.

At the time Fort Yellowstone was turned over to the National Park Service in 1918, it consisted of approximately 80 military structures, including troop and officers quarters, a chapel, a hospital, water reservoirs, stables, shops, storehouses, etc. In addition, there were a number of U. S. Engineer buildings. Some of the buildings were similar to structures in other military installations of the period. In particular, buildings nearly identical to the Double Officers Quarters (Buildings 4-7) were constructed at Fort Spokane, Washington, and Fort Lapwai, Idaho, and stables of similar design are to be found at the Presidio in San Francisco.

The buildings were primarily of either frame or stone masonry construction. The stone buildings were among the last of the buildings to be built by the Army, and are particularly noteworthy. These had walls of locally qarried sandstone, unusual both in terms of durability and appearance, but particularly appropriate for the location, and they have weathered the years well. The gray stone buildings with their red tile roofs and the bright red and white color scheme of the frame buildings are among the predominant impressions to be found regarding the historical character of the post.

A list of all of the Fort Yellowstone structures as well as a list of those structures still remaining will be found in the appendix. Photographs and maps of historical conditions and appearances will also be found in the appendix. Succeeding sections of this report will deal with the individual structures in detail.

2. Description of Existing Appearance and Conditions

Because most of the major Fort Yellowstone structures are still in existence, the post retains much of its original appearance. Although most of the outlying facilities have

disappeared, one of the reservoirs and the cemetery still remain; and while few of the early concession facilities still exist, the present concessioners continue to maintain facilities in approximately the same locations. In addition, there have been relatively few structures added in the immediate area (except for concession facilities) and few major alterations to the original buildings.

The buildings have continued to be used either for their original purposes or for generally compatible uses, with the result that the basic use patterns of the fort have been retained. Like the concession facilities, the residential, administrative, and service facilities remain in approximately their original locations.

Perhaps the single greatest change has been in the street system. The transition from horse and stagecoach to automobile as the common means of transportation in the Park has brought about a change in traffic patterns, as well as eliminating the need for a number of the original buildings, such as stables and haysheds. To accommodate these changes, and the greatly increased numbers of visitors to the area, the National Park Service has altered some of the street locations, and of course, they have virtually all been paved. Changes such as the boulevard separating the bulk of the Fort itself from the concession facilities are definite improvements, being both aesthetically pleasing as well as functional. Other changes are less fortunate, being primarily the result of use patterns. The distant approaches to the fort, and the initial views of it, remain approximately the same. Some of the immediate approaches to it have been altered, notably the blocking off of Avenue "A" and the relocation of the approach from the North Entrance.

In terms of buildings, the concession facilities have undergone the greatest changes and are by far the most detrimental elements in the whole area. Almost all of the original concession facilities, some of which were quite handsome, have been removed and replaced with structures of little or no architectural merit.

There have been only a few structures added to the immediate area by the National Park Service. The major ones are a utility building, no. 23; an apartment building, no. 70; a clinic, and a post office.

A large National Park Service residential area has been created nearby and to the east, but this lies at the base of the "Hotel Terrace," and is therefore generally out of sight and presents little intrusion upon the fort itself. This is also true of the campground located in the same general area. The only historic structure immediately affected in this regard is the powerhouse, building no. 56.

Of approximately 80 army structures at Fort Yellowstone, about half remain. Most of those which have been removed were minor service buildings, such as fuel sheds and root cellars. Among the major changes, however, were demolition of the first hospital, building no. 15.; demolition of the second hospital, building no. 18.; demolition of the troop barracks, building no. 26; relocation of the post bakery and remodeling it for a residence, building no. 24; severe alterations to the cavalry stable, building no. 28; removal of the first power-house; and removal of those buildings comprising what was known as "the wagon-train outfit."

The plantings begun by the Army (probably as part of W. H. Manning's landscape plan) have reached maturity. In this respect, the present appearance is probably closer to the visions of those who planned Fort Yellowstone. On the other hand, the track and the tennis courts are gone, and much of the parade ground has been reclaimed by the natural vegetation of the area.

The conditions of the buildings are generally good. Their substantial construction and good maintenance policies are primarily responsible for this.

The overall result is a complex which has adapted well to its present uses while retaining much of its original flavor as an army post. It has reached a pleasant maturity wherein it may continue to serve well as park headquarters, yet with some judicious changes and restoration, it will also be able to present to the public much of the original character of Fort Yellowstone during its occupation by the Army.

Photographs and maps of existing conditions and appearances are included in the appendix, and detailed information pertaining to the individual remaining structures is to be found in succeeding sections of this report.

3. Historical Evidence Uncovered by Physical Investigations

Most of the physical investigations undertaken at Fort Yellowstone for the purpose of determining historical conditions were directed at individual structures rather than the post as a whole. There was onenoticeable exception.

Based on historical descriptions and photographs of the structures, a conjectural color scheme was developed for the whole post and an attempt was made to verify these colors by physical investigations. While these investigations were made on individual structures, the efforts were directed primarily at determining the overall appearance and character of the area.

Documentation of the original colors was successful only to a limited degree, and some additional investigations in this area should be made. Nevertheless, sufficient evidence was obtained to indicate that the color scheme as developed probably comes close to reflecting the historic conditions. This color scheme is included in the appendix.

4. Recommended Treatment

The immediate construction activities necessary to the restoration of Fort Yellowstone are primarily related to work on the individual structures themselves. These proposed treatments are contained in the sections pertaining to the individual buildings.

It is recommended that Fort Yellowstone be established as a historic district within the park, and placed on the National Register as such. The primary intent of the visual development within this district should be the restoration of the historic scene. This involves long-range activities, and the planning for such should be in the nature of a master plan, with historical considerations being given utmost importance in its development. Therefore, history-related activities that should be included as part of the master plan and ultimately carried out in the development of the area are included herein. This includes some suggestions regarding those areas not included within the proposed historic district, but which will affect or be affected by the historical restoration of Fort Yellowstone.

To completely restore the post to its historic conditions, rigidly ahering to the original appearance and construction of

each structure would preclude a continuing useful existence for the complex. It should be remembered that the one thing here that has been continuously preserved is the historical usage of the area, which is that of park headquarters. In this respect, the role of the National Park Service might ultimately equal or overshadow that of the Army. This is a viable community which has undergone and could continue to undergo some changes which are definite improvements aesthetically and functionally over the original conditions, and it is felt that the merit of these changes should be weighed against the value of the restored scene in each case. There are existing structures dating to the army period which are of little significant historic, aesthetic, or useful value, which could be removed. There are some historical features which have been removed and which, if restored, would be of aesthetic and functional value, as well as adding to the historical scene. There have been additions to the area during its continuing use as park headquarters which are pleasing and potentially important in the historic development of Yellowstone and the National Park Service, and there are those which would best be done away with quickly. Finally, there are future changes outside the realm of restoration which would insure the continuing usefulness of Fort Yellowstone while yet being compatible with the purpose of this report, which is to outline those aspects of its original appearance that should be retained, restored, or reconstructed in order to best present the historic scene to the public.

The Yellowstone Master Plan currently on file at the Denver Service Center calls for the removal of the Fort Yellowstone complex as an intrusion upon the natural phenomena; construction of a road by-passing the area and construction of new administration and visitor facilities. Fortunately, the historical importance of Fort Yellowstone has since been recognized and Fort Yellowstone is scheduled for perservation and restoration.

Nevertheless, there are aspects of this plan which should be retained. The by-pass road would serve well, as it would eliminate the necessity for through-traffic to pass through the complex itself. The removal of the campground to a location away from the NPS residential area would also be an improvement. It is also recognized that there are some structures which are indeed intrusions upon the natural conditions, and consideration should be given to their removal, but only after giving due consideration to their historic value.

Physical investigation has shown that the buildings are, for the most part, sound and compatible with their present uses. With this in mind, construction of new facilities which can reasonably be retained in their present location would be a needless expense. In those instances where new facilities are desirable, or may someday become desirable, their proximity to those facilities which do remain is important. Since the historical aspects of the fort are to be important visitor attractions, visitor-related facilities are important; equally important is the close relationship of administration facilities to the warehouses, fire station, clinic, and post office. These are historic uses of the area, and could be retained without undue intrusion upon either the historic scene or the natural phenomena.

Important adjuncts to both administrative functions as well as to visitor usage are the concession facilities. Concession facilities have been part of the fort scene since the army days. Such facilities as the chapel, clinic, and post office are provided here, serving visitors as well as the Park Service. Coupled with the natural and historic attractions of the immediate area, there continues to be a need for concession facilities. It would certainly be pleasant to dine in a restaurant overlooking a restored parade ground and "Officers Row," or to stroll in the evening through the grounds of the fort, or explore the Mammoth Hot Springs without having to drive to these locations. The existing facilities, however, are without architectural merit as well as being outmoded, inadequate, of doubtful safety, and probably uneconomical to the concessioner. Removal of the existing structures and replacement with new ones compatible with the fort in appearance and function could be accomplished without undue scenic or historical intrusion, while yet providing important services to both the Park Service and to visitors.

Simplification of the street and sidewalk system (including restoration of parts of the original system) would facilitate a walking tour of the grounds and with minimum interference between pedestrians and normal vehicular traffic. See Appendix, Map 6. It is suggested that Avenue "C" in front of "Officers Row" could be retained for the convenience of the residents and especially their guests, but that visitor use be discouraged by appropriate signing and by restoration of Avenue "D." Some road re-alignment and institution of one-way traffic patterns as shown might also be considered. Pedestrian traffic could be accommodated with only a small number of pedestrian crossings--certainly a safety feature insofar as

children and local residents are concerned. The elimination of through traffic in the area, as shown and as is presently being contemplated, will also be a great improvement in this regard.

The basic character and function of the fort area should continue to be residential, and future use changes in the historic sturctures should tend in this direction. Consideration should be given to the eventual elimination of visitor contact and administration functions from the fort structures themselves, thus assuring a greater degree of privacy to those who live in them. This would also aid in their preservation by enabling the Park Service to present the historic scene while protecting the structures themselves by keeping visitors at a distance.

Some changes in the usage of several historic buildings might eventually be made as follows:

(1.) Bachelor Officers Quarters: This building currently houses the Visitor Center/Museum and seems adequate and well located for such usage. If, however, this building should become no longer suitable or adequate for such purposes, it should be remodeled for use as multiple residential units.

(36.) Double Cavalry Barracks: This building currently houses the park administrative offices, and has just undergone extensive interior remodeling. It appears that it should house these facilities comfortably and well for some time to come. However, if at some time in the future this usage should be abandoned, this building should be remodeled to apartments for Park Service employees.

(39.) U. S. Engineer's Office: This building currently houses the north district ranger officers. It does not lie within the historical post boundaries, and its remote location (across the boulevard from the Fort proper) makes it more suitable for public use. Its distinctive design and historical significance warrant special treatment and at least partial interior restoration. It is therefore suggested that an appropriate use would be to house the Park library and archives, especially in view of the fact that the present facilities are woefully inadequate. While this would permit only limited public access, it would nevertheless give this building the importance it deserves.

Restriction of service functions to buildings 34, 37 and 38 would concentrate these uses in a small area. Additional service facilities of this type could be provided in the area once occupied by the Yellowstone Transportation Co. structures or elsewhere as appropriate. This, plus conversion of the following two structures from utility to community facilities, would further enhance the residential quality of the area:

(25.) Cavalry Stables: This building could be given over to garage and storage uses for Park Service employees.

(27.) Troop Barracks: The central location of this building to the rest of the Fort complex and its immediate proximity to the gymnasium and the present playground make it ideal for future use as a community building. This would facilitate its exterior restoration and allow interior restoration as well, providing important community facilities, in the process.

Removal of those buildings as shown on the Proposed Historic Structures Preservation Plan, Map 6 of the Appendix, would provide open spaces, open up views, eliminate eyesores, and perhaps even emphasize the historical scene by eliminating distractions and improving the quality of the environment in general. This would include, but not necessarily be limited to, the following buildings: 22, 23, 48, 62, 75, 76, 77 and 78.

The parade ground is an important element to any fort, and without which the historical scene would not be complete. The parade ground should therefore be reseeded and maintained in lawn. An important feature of this restoration would be the reconstruction of the original flagpole. (See Appendix, plate 105.)

The overall layout of Fort Yellowstone can best be seen from atop Capitol Hill. Acting Yellowstone Superintendent R. H. Lovegren, in his memo of Sept. 17, 1968, to the Regional Director, Midwest Region, proposed a short trail to the top of Capitol Hill so that the visitor might take advantage of this view. A cannon used to fire morning and evening salutes (more commonly known as the "sunset gun") once occupied this site. Of additional interest is the fact that around 1878, Park Superintendent Philetus W. Norris "completed and occupied a unique structure on Capitol Hill, called Fort Yellowstone. It was a blockhouse of hewn timber with a balcony and three wings,

surmounted by a gun turret."[1] The sunset gun should definitely be reconstructed and consideration might want to be given to the reconstruction of the blockhouse as an item of added visitor interest. The provision of a trail to this site would be quite appropriate, especially in view of its proximity to the Haynes Photo Studio at the base of the hill. A parking area to serve both could well be provided there. (See the appropriate section of this report regarding the Haynes Studio.)

The recommended treatments and construction activities which have been outlined herein are intended to form a basis for the ultimate restoration of Fort Yellowstone. Those activities most closely related to the individual structures themselves can, for the most part, be accomplished in the near future. All other proposals are intended to be guidelines for the continuing use and development of Fort Yellowstone without destroying its historical integrity, and can only be accomplished as policy and conditions allow.

5. Recommended Further Study

(1.) It is recommended that additional and more extensive investigations be made on the individual buildings to verify their original colors prior to restoration.

(2.) The recommendations that are presented herewith regarding the development of the Mammoth Area are intended as food for thought. Until now, little attention has been paid to historical considerations in the planning of the area. It is suggested that the establishment of Fort Yellowstone as an Historic District will have a great effect on the area and that perhaps some further developmental studies for the area are warranted, with equal weight being given to the historical resources.

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1. Merrill D. Beal, The Story of Man in Yellowstone, (Caldwell, Idaho, 1949), p. 242.

Building Number 1

Common Name: Visitor Center/Museum

Historic Name: Bachelor Officers Quarters

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
RCP: B-517.
Drawings: NPS: 101/8118, 7 sheets.
Photographs: Yellowstone Buildings Register; Vol. 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 1, Bachelor Officers Quarters, Army No. 54

Two-story, stone, tile roof. Completed June 30, 1909. Cost, $38,022. Apartments for six single officers and an officers' mess or club. When it was built, there were more than enough officers quarters at Fort Yellowstone for the permanent staff. The Army planned this building sufficiently large so as to house temporary visitors, such as the dental surgeon, the inspector general, courts martial boards, and so forth. Today it houses a museum, library, archives, offices, storage rooms, rest rooms, and a residence.

Sources: "Early Pictures, Government Buildings, 1886 to 1912," Item No. 167, Yellowstone Archives.

Architectural Data

Description of Historic Appearance and Conditions

This building is a two-story structure with walls of local sandstone and a hipped roof of red clay tile. Its major wing runs north and south, with a smaller wing centered on it to the east. It faces the parade ground to the west, and its features are symmetrical about a central east-west axis. A large roofed porch extends along the major portion of the west elevation. There are two attic dormers on the west side of the roof at either end of the building which are sided with wood shingles, and a stone gable on the central axis. A semi-circular attic window set in an arched opening in this gable is a predominant feature of the structure. Wood double-hung windows were generally used throughout, with dressed stone lintels and sills. Eaves, soffits, and trim were made of wood, and were painted.

See appendix, plate 23 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

The appearance of this structure is, for the most part, historically intact on the exterior. Major exterior alterations include exterior entrances to public restrooms which have been constructed beneath the front porch.

There is some cracking of the masonry walls--possible earthquake damage. However, the building appears to be structurally sound, with no evidence that it has settled. Some spalling of cut stone lintels, sills, and water tables has occurred, and some carpentry repair is needed on the trim, porches, and miscellaneous wood items. The window sash and casings appear to be in generally good condition. The building is in need of paint, and the paint colors are not historic. There is also a strong possibility that the roof will need considerable attention in the near future.

The interior has undergone considerable alterations for use as a visitor center/museum.

See appendix, plate 24 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

This structure is primarily in need of maintenance attention. Necessary carpentry and repair should be undertaken. The cracks in the masonry wall should be sealed and repointed. Consideration should be given to treating all sandstone surfaces with a water-repellant coating to reduce spalling, cracking and staining. Partial, if not complete, replacement of roof tile and underlayment will probably be required.

All painted surfaces should be repainted in their historic colors. See appendix, page 315 for color schedule.

Recommended Further Study

Additional investigation of the roof will be necessary to determine if extensive repairs will be needed, and their nature and extent.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Bachelor Officers Quarters			Visitor Center/Museum		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	Yes	Yes	2	Yes	Yes
3. SIZE (Overall)	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing Total	99' x 34' 30' x 48'		3366 SF 1440 4806 SF	Same		
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Kitchen Sitting Room Dining (Mess) Bedrooms Baths Corridors Storerooms Laundry Assembly Room Pantry Total	1 1 1 12 9 4 2 1 1 1 32	This information obtained from construction drawings only. No physical investigation has been made.			No physical investigation of the interior has been made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	See item 4. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES URINAL	9 9 8 3 1 1 1	See item 4. Coal-fired furnance H. W. Radiators ea. room.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Concrete	
CONSTRUCTION	20" PIP wall, 12" x 32" ftg.	
FINISH	Cement plaster	
COLOR	Natural	
REMARKS		
WALLS		Original
MATERIAL	Sandstone (local)	
CONSTRUCTION	18" Ashlar masonry	
FINISH	Pitch face - smooth lintels, sills and water tables	
COLOR	Natural (gray)	
REMARKS		
ROOF		Original
CONSTRUCTION	2 x 8 rafters, 1" wd. sheath.	
UNDERLAYMENT	Felt	
ROOFING	Clay tile	
TYPE	French	
COLOR / FINISH	Unglazed red	
REMARKS		High probability that roofing and underlayment deteriorated.
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	White	Cream
REMARKS		
DORMERS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Wood Shingles	
COLOR	Red shingles, white trim	Brown Shingles, cream trim

Building Number 2

Common Name: Residence

Historic Name: Double Captains Quarters

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
RCP: B-517.
Drawings: NPS: 101/8166.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 2, Double Set of Captains Quarters, Army No. 53

Two-story with finished attic, stone. Tile roof. Completed June 30, 1909. Present use--two residences.

Sources: Ibid.

Architectural Data

Description of Historic Appearance and Conditions

This building is a two-story duplex with walls of local sandstone and a hipped roof of red clay tile. The building is divided into two apartments by a wall running from basement to attic the plans and features of the building being symmetrical about a central east-west axis at this wall. It faces the parade ground to the west. Each apartment has a covered entrance porch, one on the north elevation and one on the south. Both apartments have a rear porch on the east elevation. The attic was finished, and hipped dormers with wood shingle siding admitted light to those rooms. Wood double-hung windows were generally used throughout, with dressed stone lintels and sills. Eaves, soffits, and trim were made of wood, and were painted.

See appendix, plate 25 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

The historic appearance of this building is generally intact, with no major exterior alterations.

There has been very little cracking of the stone walls, although there has been the usual amount of spalling at the cut stone sills, lintels, and watertables. The roof is probably in need of extensive work; peeling paint at the cornice overhangs indicates the probability of water penetration in this area. This structure badly needs paint, and the paint colors are not historic. Window sash and trim appear to be in good condition.

See appendix, plate 26 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

This structure is primarily in need of maintenance attention. Any necessary carpentry and repair should be undertaken. Any cracks in the masonry wall should be sealed and repointed and consideration given to treating all sandstone surfaces with a water-repellant coating to reduce spalling, cracking, and staining. Partial, if not complete, replacement of roof tile and underlayment will probably be required.

All painted surfaces should be repainted in their historic colors. See appendix, page 315 for color schedule.

Recommended Further Study

The roof should be investigated to determine the nature and extent of any necessary repairs.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Double Captains Quarters			Park Staff Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	yes-fin.	Yes	2	yes-fin.	Yes
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing Total	28' x 58' 23' x 45'		2204 SF 1035 3239 SF	Same		
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Kitchens Living Rooms Dining Rooms Bedrooms Bathrooms Corridors Utility Mech. Pantries Laundries Total	2 2 2 12 4 8 2 2 2 36	This information obtained from construction drawings only. The number of rooms in conjectural as part of the drawings are missing.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	See item 4. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES	6 4 4 8 2 2	See item 4. Coal-fired furnance H. W. radiators each room.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Concrete	
CONSTRUCTION	20" PIP wall, 12" x 32" ftg.	
FINISH	Cement Plaster	
COLOR	Natural (gray)	
REMARKS		
WALLS		Original
MATERIAL	Sandstone (local)	
CONSTRUCTION	18" ashlar masonry	
FINISH	Pitch race - smooth lintels, sills and water tables.	
COLOR	Natural (gray)	
REMARKS		
ROOF		Original
CONSTRUCTION	2"x 8 rafters, 16" cc. 1" wood sheating	
UNDERLAYMENT	Felt	
ROOFING	Clay Tile	
TYPE	French	
COLOR / FINISH	Unglazed Red	
REMARKS		High probability of deteriorated roofing and underlayment.
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	White	Cream
REMARKS		
DORMERS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Wood Shingles	
COLOR	Red shingles, white trim	Brown shingles, cream trim

Building Number 3

Common Name: Superintendent's Residence

Historic Name: Field Officer's Quarters

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued national Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
RCP: B-517.
Drawings: NPS: 101/8119.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 3, Field Officers Quarters, Army No. 52

Two-story with finished attic, stone. Tile roof. Cost, $20,624. Built as a residence for the acting superintendent/post commander in 1909.

When Maj. Henry Allen first saw the plans for this building, he wrote the department commander: "I beg to state that this place, like West Point, Fortress Monroe, Fort Meyer, and probably a few other posts, is annually visited by a large number of people (16,414 last year) and that it is incumbent upon the Commanding Officer to

be prepared to house more persons than would be possible with a field officer's set." The plans that he saw called for:

Basement: concrete floor, laundry, boiler room, storeroom.
1st Floor: entrance hall, library, parlor, dining room, kitchen, 2 pantries.
2d Floor: dressing room, 4 bedrooms, 2 bathrooms.
Attic: 2 bedrooms, with space for a third bedroom and a bathroom, if required.
Estimated cost: $17,015 ($500 for extra attic rooms).

A commanding officer's house (the next larger, and designed for colonels and above at regimental or larger posts) would cost $21,150.

The Secretary of War turned down Major Allen's bid for the larger quarters, but he did approve of the extra bedroom and bath in the attic.

Apparently Allen succeeded, through friends, in getting U. S. Senator Thomas H. Carter interested in the matter. Carter made an inquiry at the War Department but was "advised that two additional rooms have been added to the original plans . . . and that ample space has been provided for extras in the bachelors' quarters and there will be adequate reception rooms, etc." The house, as built, followed the plan with the additional rooms on the top floor.

At that time, the U. S. Army allowed certain items of furniture for officers quarters. The government issue furniture in this building consisted of: 1 dining table, 1 library table, 1 sideboard, 1 library desk, 2 chests of drawers, 1 divan, 1 hall tree, 6 side chairs, 2 arm chairs, 2 library chairs, 2 library side chairs, 1 bookcase, 1 refrigerator, and 1 kitchen table.

Present use: residence for park superintendent.

Sources: "Early Pictures;" NA, RG 393, Ft. Yellowstone, Letters Received, 1905-10, Box 2: CO, Ft. Yellowstone, Mar. 13, 1908, to AG, Dept. of Dakota; 3d indorsement, OQMG, Mar. 23, 1908, to AG; 4th indorsement, Henry P. McClain, AG, Mar. 25, 1908, to QMG; Senator Thomas H. Carter, Apr. 23, 1908, to Harry W. Child, Helena, Mont.

Architectural Data

Description of Historic Appearance and Conditions

This building is a two-story residence with walls of local sandstone and a hipped roof of red clay tile. It has a main wing running north and south, and a smaller wing centered on it to the east.

Its features are generally symmetrical about a central east-west axis. It has a generous roofed entry porch on the west elevation, which faces the parade ground. The attic was finished, and hipped dormers on all sides admitted light to these rooms. These dormers were sided with wood shingles. Wood double-hung windows were generally used throughout, with dressed stone lintels and sills. Eaves, soffits, and trim were made of wood, and were painted.

See appendix, plate 27 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

The historic appearance of this building is generally intact, with no major exterior alterations.

The stone walls are generally in good condition, although there has been some separation at the front porch. The walls show evidence of having been repointed in some areas, and there has been some spalling at the sills, lintels, water tables etc. The chimney at the east dormer is missing, having been roofed over during repair following the 1959 earthquake. The roof is probably in need of extensive repair; peeling paint at cornice overhangs may be evidence of water penetration in these areas. Paint is also needed in other areas, and the existing paint colors are not historic. Window sash and trim appear to be in good condition.

See appendix, plate 28 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

This structure is primarily in need of maintenance attention. Any necessary carpentry and repair should be undertaken. Any cracks in the masonry wall should be sealed and repointed, and consideration given to treating all sandstone surfaces with a water-repellant coating to reduce spalling, cracking, and staining. The chimney at the east wing should be reconstructed to its original appearance. The roofing underlayment and some, if not all, of the roof tile will probably require replacement.

All painted surfaces should be repainted in their historic colors. See appendix, page 315 for color schedule.

Recommended Further Study

The roof should be investigated to determine the nature and extent of any necessary repairs.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Field Officer's Quarters			Superintendent's Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	Finished	Yes	2	Finished	Yes
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing Total	34' x 43' 22' x 28'		1462 SF 616 2078 SF	Same		
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Kitchen Living Room Dining Room Bedrooms Corridors Utility/Mech. Laundry Total	1 1 1 8 3 1 1 19	This information obtained from construction drawings only. The number of rooms is conjectural as part of the drawings are missing			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER	Yes	See item 4.			See item 4.	
SEWER	Yes					
ELECTRICITY	Yes					
GAS / OIL	No	Coal wood				
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		Unknown. See item 4.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Concrete	
CONSTRUCTION	20" PIP wall, 12" x 32" ftg.	
FINISH	Cement Plaster	
COLOR	Natural (gray)	
REMARKS		
WALLS		Original
MATERIAL	Sandstone (local)	
CONSTRUCTION	18" ashlar masonry	
FINISH	Pitch face - smooth lintels, sills and water tables	
COLOR	Natural (gray)	
REMARKS		
ROOF		Original
CONSTRUCTION	2 x 8 rafters, 16" cc. 1" wood sheathing	
UNDERLAYMENT	Felt	
ROOFING	Clay tile	
TYPE	French	
COLOR / FINISH	Unglazed red	
REMARKS		High probability of deteriorated roofing and underlayment.
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	White	Cream
REMARKS		
DORMERS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Wood Shingles	
COLOR	Red shingles, white trim	Brown shingles, cream trim

Building Numbers 4 and 5

Common Name: Duplex Residences

Historic Name: Double Officers Quarters

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. These buildings will receive exterior restoration only as part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
RCP: B-517.
Drawings: NPS: 101/8113; National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 4, Double Officers Quarters, Army No. 27

Two-story, frame building. Tin roof. Completed March 7, 1897. Cost, $6,829. Designed for two officers of captain's rank, but often used by officers of lesser rank.

Present use: Residences.

Sources: "Early Pictures."

HS 5, Double Officers Quarters, Army No. 26

Two-story, frame building. Tin roof. Completed March 7, 1897. Cost, $6,839. Designed for two officers of captain's rank, but often used by officers of lesser rank.

GI furniture in building ca. 1912: 2 dining tables, 2 library tables, 2 sideboards, 2 library desks, 2 divans, 4 chests of drawers, 2 hall trees, 12 side chairs, 4 arm chairs, 4 library chairs, 4 side chairs for library, 2 bookcases, 2 kitchen tables, 2 refrigerators.

Present use: Residences.

Sources: "Early Pictures."

Architectural Data

Description of Historic Appearance and Conditions

These buildings are two-story duplexes of frame construction with rusticated siding and hipped roofs. The roofs were originally covered with metal shingles. The design of these structures is probably to a Q.M.G.O. standard, similar structures having been constructed at other posts throughout the northwest. The buildings are divided into two apartments by a wall running from basement to the attic, the plans and features of the buildings being symmetrical about a central east-west axis at this wall. They face the parade ground to the west. Although the porch which runs along the west elevation of the buildings was generally left open at other posts, at Fort Yellowstone a portion of it was enclosed at its center to form entry vestibles to each apartment. Both apartments in each structure had rear porches which extended across the entire east elevation. There is a dormer at the attic on the west elevation of each structure, and a gable end on the east elevation. One of the most interesting features of the structures is the eyebrow dormers occurring at the attic level on the north and south elevations. Wood double-hung windows were generally used throughout. The entire structure, including the roof, was painted.

See appendix, plates 29 and 31 for photographs of their historic appearance.

Description of Existing Appearance and Conditions

The historic appearances of these buildings are generally intact, with no major exterior alterations, except for replacement of the original roofing material.

The stone foundations appear to be in good condition. Some crawl space vents are broken and missing. Partial basements and area ways have apparently been added--probably to accommodate central heating.

The frame walls appear to be in good repair. Some balusters, lattice-work, etc., need repairing and/or replacing. The front porch columns rest on brick piers, and some settling has occurred due to the deterioration of these piers. The rear porches have been partially enclosed (unless this was an original design feature not shown on the plans). The original cornices and the metal gutters and downspouts have been removed. The window sash, doors, and casings appear to be in good condition.

The chimneys are intact, but deteriorating at the caps. The fireplace chimneys in the exterior walls have been painted to match the siding.

The original metal shingle roofing has been removed and replaced with asbestos shingles which in turn are deteriorating.

The paint is beginning to crack and blister. The paint colors are not historic.

See appendix, plates 30 and 32 for photographs of the existing appearances of these buildings.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

This structure is in need of maintenance attention. The crawl space vents should be repaired or replaced. The porches and steps should be repaired and replacements for balusters and lattice-work should be made. The brick chimneys should be repaired and repointed.

The cornices should be rebuilt to their original appearance, and the gutters and downspouts replaced. The asbestos shingles should be removed and replaced with metal roofing to match the original.

Paint should be removed from the brickwork, and all painted surfaces should be repainted in their historic colors. See appendix, page 323 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Double Officers Quarters			NPS Staff Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	Yes	No	2	Yes	Partial
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing Total	48' x 60' 25' x 38'		2880 SF 950 3830 SF	Same		
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Kitchens Living Rooms Dining Rooms Bedrooms Corridors Pantries Bathrooms Total	2 2 2 8 4 2 2 22	This information obtained from construction drawings only.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	See item 4. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES	2 2 2 2	See item 4. Buildings originally heated by fireplaces and stoves.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Stone	
CONSTRUCTION	18" rubble masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		
CONSTRUCTION	2 x 4 rafters, 24" cc.	Original
UNDERLAYMENT	Wood sheathing	
ROOFING	Metal shingles	Asbestos shingles
TYPE	Diamond Pattern	
COLOR / FINISH	Painted red	Integral - varied colors
REMARKS		Original cornices, metal gutters have been removed
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		
FIREPLACE CHIMNEYS		Original
MATERIAL	Brick	
FINISH	Natural	Paint
COLOR	Red	Cream

Building Numbers 6 and 7

Common Name: Duplex Residences

Historic Name: Double Officers Quarters

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. These buildings will receive exterior restoration only as part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
RCP: B-517.
Drawings: NPS: 101/8113; National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 6, Double Officers Quarters, Army No. 4

Two-story, frame building. Tin roof. Completed Dec. 5, 1891. Designed for two officers of captain's rank, but often used by officers of lesser rank. It was one of the structures retained by the U. S. Engineer Officer when the Army turned the fort buildings over to the Interior Department in 1916. Each half of the duplex had a parlor, dining room, kitchen, 4 bedrooms, bathroom, pantries, and closets.

Present use: Residences.

Sources: "Early Pictures."
NA, Cartography Division, floor plans.

HS 7, Double Officers Quarters, Army No. 3

Two-story, frame building. Tin roof. Completed in 1891. This structure was also retained by the U. S. Engineer Officer in 1916, when the Army turned over the post to the Interior Department. Interior arrangements same as for HS 6.

Present use: Residences.

Sources: "Early Pictures."

Architectural Data

Description of Historic Appearance and Conditions

These buildings are two-story duplexes of frame construction with rusticated siding and hipped roofs. The roofs were originally covered with metal shingles. The design and appearance of these buildings is virtually the same as buildings 4 and 5, with minor variations in details and proportions.

See appendix, plate 33 for photograph of their historic appearance.

Description of Existing Appearance and Conditions

The historic appearances of these buildings are generally intact, with no major exterior alterations, except for replacement of the original roofing material.

The conditions of these buildings are not generally as good as those of buildings 4 and 5. This is probably due in part to the fact that they are the older of the structures, and also to better detailing in the construction of the later buildings.

There is some deterioration of the stone foundations. These buildings sit much closer to the ground, with the front porch joists practically on grade. There has been some rotting and general deterioration in these areas.

The frame construction is in generally good condition. Some minor repair and replacement is needed. At least the rear porch enclosure at the north apartment in building no. 6 is not original.

Window sash, doors, and casings appear to be in good condition. The original cornices and metal gutters and downspouts have been removed.

The chimneys are generally intact, but deteriorating. The caps at building 6 are deteriorating; the caps at building 7 have been rebuilt, but not to their original configuration, and one chimney is missing entirely. The fireplace chimneys in the exterior walls have been painted to match the siding.

The original metal shingle roofing has been removed and replaced with composition shingles.

There is some cracking and blistering of the paint, and the colors are not historic.

See appendix, plates 35 and 37 for photographs of the existing appearances of these buildings.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

These buildings are in need of maintenance attention. The foundations need to be repaired and repointed. All necessary replacement of balusters, lattice-work, etc., should be made, and the front porches repaired.

Adequate ventilation and crawl space should be provided beneath the front porches and all other floor joists as may be required. Added ventilation should be provided if necessary.

The rear porch enclosure on the east side of building 6 that is obviously not original (the north apartment) and should be removed.

The brick chimneys should be repaired, and the missing chimney rebuilt. All brickwork not to the historic configuration should be removed and rebuilt accordingly. All paint should be removed from the brickwork.

The cornices should be rebuilt to their original appearance, and the gutters and downspouts replaced. The composition shingles should be removed and replaced with metal shingles to match the original.

All painted surfaces should be repainted to their historic colors. See appendix, page 323 for color schedule.

Recommended Further Study

Additional investigations should be made in the subfloor areas to determine if there is adequate space between the floor joists and grade, to assure that there are no earth-wood contacts, and to determine that the ventilation to these spaces is adequate.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Double Officers Quarters			N. P. S. Staff Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	Yes	No	2	Yes	
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing Total	48' x 60' 25' x 38'		2880 SF 950 3830 SF	Same		
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Kitchens Living Rooms Dining Rooms Bedrooms Bathrooms Corridors Pantries Total	2 2 2 8 2 4 2 22	This information obtained from construction drawings only.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	See item 4. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES	2 2 2 2	See item 4. Buildings originally heated by fireplaces and stoves.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Stone	
CONSTRUCTION	18" rubble masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		Some foundation deterioration.
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		Original
CONSTRUCTION	2 x 4 rafters, 24" cc.	
UNDERLAYMENT	Wood sheating	
ROOFING	Metal shingles	Composition
TYPE	Diamond pattern	Square tab
COLOR / FINISH	Painted - red	Integral - variated red
REMARKS		Original cornices, metal gutters have been removed.
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		
FIREPLACE CHIMNEYS		Original
MATERIAL	Brick	
FINISH	Natural	Paint
COLOR	Red	cream

Building Number 8

Common Name: Residence

Historic Name: Administration Building

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
RCP: B-517.
Drawings: NPS: 101/8104; National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 8, Administrative Building (or Post Headquarters), Army No. 2

One-story, frame building. Tin roof. Completed Dec. 5, 1891. Cost, $1,550. Later, when post headquarters moved into the old hospital, this building became the electrical supply storehouse. Three fireplaces of a style similar to those in officers quarters.

The post commander/acting superintendent had his office in this building. With him was the post adjutant and the sergeant major. All the post commanders complained of its small size.

Capt. George Anderson, in 1892, requested and got roller shades for his three windows: "I prefer the fixtures should be for the side of the casing, and not for the end of the roller (inside of casing). If the former kind are sent, the roller should be 38" or 40" long. If end fixtures, the rollers should be just 34" in length. Windows are 7'5" long."

The structure had been designed for a one-troop post; thus it began to get crowded when the post expanded to two, and then four, troops. Further complications arose when General Young was acting superintendent and Major Allen was post commander. The addition of a telephone central did not help.

Major Pitcher started complaining about the building as soon as he arrived in 1901. Year after year, he requested funds for enlarging the structure. All his requests were answered with silence. When it came time to install the telephone central, he decided to act on his own: "In looking about the Post . . . I discovered . . . sufficient lumber to put up the frame work . . . and sheath it on the outside and place it in such condition that we could use it during the summer, and I directed the Post Quartermaster to commence work. . . . By using some doors and windows, which we had saved from an old Exchange Building, completed the room in a very credible shape." The one-room addition measured 10 by 22 feet. No sooner did Pitcher finish this new room than he received the long-sought authorization to spend $239.64 on the building.

In 1908, Major Allen renewed the complaints about the building, which he called an "eyesore." He did not want it expanded; he wanted it demolished and replaced with a $30,000 structure: "The time is gone when the Government should permit insignificant unsightly buildings at this great show place."

General Young agreed: "There is no place nor seclusion for distinguished citizens . . . who desire to confer with the Superintendent . . . no place excepting out of doors for waiting room."

When the new post hospital was built in 1913, the post commander moved his offices into the old post hospital. At the time the Army turned the structure over to the Department of the Interior in 1916, it was being used as an electrical equipment storehouse.

Present use: Residence.

Sources: "Early Pictures; Yell. Archives, Letters Sent, 4, 1892-94, Anderson, Nov. 7, 1892, to Sect. of the Interior; Letters Received, 7, 1906-08, Allen, Aug. 19, 1908, to AG, Dept. of Dakota; Letters Sent, 19, 1908-09, Young, Aug. 20, 1908, to Allen; v. 104, "Statement of Buildings at Fort Yellowstone . . . transferred to Interior," Aug. 1, 1916; NA, RG 393, Ft. Yellowstone, Letters Sent, 1903-06, Pitcher, Aug. 8, 1906, to Chief QM, Dept. of Dakota; NA, Cartography Division, plans for building and addition.

Architectural Data

Description of Historic Appearance and Conditions

In its initial state, this building was a one-story building approximately 18 feet by 42 feet in size, oriented in a north-south direction. It had a gabled roof covered with metal shingles; a large covered porch ran the length of the building on the west side, facing the parade ground; an attic dormer was centered on the building on the west side directly over the entry doors. The walls were covered with rusticated wood siding at the first floor level, and the attic gables on the north and south ends of the building were covered with wood shingles. The building was symmetrical about an east-west axis.

Later, at least one, possibly two, wings were added to the east side of this building by the Army. It is known that at least the southernmost of these two wings dates to the army period. See historical photograph, plate 38 of the appendix. This wing approximately 14 feet by 22 feet in size, is oriented in an east-west direction. It was joined to the original wing by a small vesitbule, a window being converted to a door for access. The wing was constructed of frame construction supported on wood piers. The walls were covered with rusticated wood siding, and the gabled roof was covered with wood shingles. Wood double-hung windows were generally used throughout the structure. The entire building, including the metal roof and probably the wood shingle roof or roofs, was painted.

Description of Existing Appearance and Conditions

This building presently consists of the original wing and two smaller parallel wings to the east. The northernmost of these two wings also has a small lean-to attached to it and the main wing on the east side. It is not known at this time whether or not this wing also dates to the army period. It is nearly identical in size and detail to the south wing.

The stone foundation under the main wing appears to be in generally good condition. The foundation conditions of the east wings are not known, as the subfloor area has been enclosed.

The building appears for the most part to be structurally sound. The wood siding and trim is in good condition. There is some earth-wood contact at the front porch, there being little or no space between the joists and grade, resulting in dry rot conditions. The trim, gutters, etc., appear to be original. Lattices have been added to the front porch.

The chimney caps have been rebuilt, and are not to their original configuration.

The original metal roofing shingles on the main wing still remain. The rear wings are still covered with wood shingles, but the double-coursed shadow lines were not used on the original application.

The paint is beginning to deteriorate and the paint colors are not historic.

See appendix, plate 39 for photograph of the existing appearance of this building.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Any necessary repairs to the foundations should be effected. Adequate earth-wood separation should be provided at the front porch, and sufficient crawl-space and ventilation provided for all other subfloor areas. All deteriorated structural members should be replaced as required.

The front porch should be repaired, and the lattices removed. The lean-to at the north wing on the east side should also be removed if possible.

The chimney-caps should be rebuilt to their original appearance, and they should be repaired and repointed as necessary.

The wood shingle roofing over the rear wings should be restored to their original appearance. The metal shingles should be repaired and replaced as required. All roofing should be made watertight.

All painted surfaces should be repainted to their historic colors. See appendix, page 323 for color schedule.

Recommended Further Study

This building is no architectural gem as it stands. No matter if only one or both of the two east wings are historic, they were makeshift from the start, and this building was considered to be an "eyesore" even then. On the other hand, the original building without these wings, small though it was, was a reasonably handsome structure. Some study might be given to removal of these wings and restoration to its original state, with the interior becoming a studio apartment or possibly put to some other use, particularly if it is found that one of the wings is not historic.

Additional physical investigation of the roof is warranted to determine if extensive repairs and/or replacement will be required.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Administration Building			Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Yes	No	1	Yes	No
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing (South) Total (East Wing - North) (Total)	18' x 42' 14' x 22' 14' x 22'		756 SF 308 1064 SF (308) (1372 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Offices Corridor Total	5 1 6	3 offices in the original wing plus 1 (probably office) in each wing. This information obtained from construction drawings only.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	No No Yes No	See item 4. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES FIREPLACES	 3	See item 4.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		
MATERIAL	Stone at main wing Wood piers at rear wings	Original stone Unknown - probably orig. wd.
CONSTRUCTION	18" Rubble masonry	
FINISH	Natural stone - painted piers	Natural - painted siding
COLOR	Natural (gray) - red piers	Natural stone - cream paint
REMARKS		
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding, Painted wd. shingles at gables	
COLOR	White siding, red shingles	Cream
REMARKS		
ROOF		Original at main wing
CONSTRUCTION	Wood frame	
UNDERLAYMENT		
ROOFING	Metal shingles Wood shingles	
TYPE	Diamond pattern metal shingles	
COLOR / FINISH	Metal Shingles: red paint	Horizontal shadow line wd. shingles
REMARKS	Wood Shingles: unknown	All shingles: green paint
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number 9

Common Name: Residence

Historic Name: Guard House

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
RCP: B-517.
Drawings: NPS: None National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 9, Guard House (first), Army No. 1

One-story, frame building. Tin roof. Completed Dec. 5, 1891. Cost, $4,950. Capacity, 15 prisoners and 10 guards. It was typical army guard house for a small post: officer's room, storeroom, guard room, general prison room, and three cells. Its location was determined by the fact that the road from Gardiner reached the Mammoth plateau at that point in 1891. This was the first army building that visitors passed.

In 1909, it was inspected, condemned, and ordered "broken up." But such was not to be its fate. The post surgeon inspected it in January 1910 and reported that the floor was "rotten & broken & should be replaced" pending construction of a new guard house. After a new guard house was constructed in 1911, this structure became the long-needed ordnance storehouse.

Present use: Residence.

Sources: "Early Pictures;" NA, RG 393, Ft. Yellowstone, Letters Received, 1905-10, Box 6, Post Surgeon, ca. Jan. 1, 1910, inspection report; Cartography Division, floor plans.

Architectural Data

Description of Historic Appearance and Conditions

This building is a one-story frame structure having a rectangular plan with its long dimension running in a north-south direction. It has a hipped roof covered with metal shingles and a large covered porch running the length of the building on the west side, facing the parade ground, and returning for about one-half the depth of the building on the north and south sides. It has an attic dormer centered over the main entrance which is in turn centered in the west elevation of the building. The building is roughly symmetrical in appearance and shape about an east-west axis, although details such as fenestration and chimney and cupola locations will be found to be asymmetrical. The walls are covered with rusticated wood siding. Wood windows were used throughout, some being of the double-hung type and others either fixed or of the casement type. The entire building, including the metal roof, was painted.

See appendix, plate 40 for photograph of its historic appearance.

Description of Existing Appearance and Conditions

The historic appearance of this building is generally intact, although there have been some exterior alterations. Among these alterations are the addition of attic dormers on the north and south ends of the building, the addition of two lean-to entrances on the rear or east side, and the elimination of one chimney and some changes in fenestration.

The stone foundation appears to be in good condition, although some repairs are warranted.

The frame walls appear to be sound, with the siding and trim in fairly good condition. There has been some deterioration of the porch, however. There is insufficient space between the porch floor joists and grade, with probable damage to the joists and flooring due to dry-rot. The porch has settled in some places, probably due to disintegration of the supporting piers. There is also evidence of broken beams and/or rafters at the porch roof. The trim, gutters, etc., appear to be original. Lattices have been added to the front porch.

The one remaining chimney has been rebuilt above the roof line, and its cap configuration is not historical.

The original metal shingle roof still remains, but does not appear to be in good condition. There has been some deterioration of the shingles, and there is a bulge in the roof or roofing of undetermined cause along the east eave line.

The building is beginning to need paint, and the colors are no longer historically accurate.

See appendix, plate 41 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

Evidence of the sizes and locations of some of the original windows and doors still remains in the exterior siding.

Recommended Treatment

All necessary repairs to the foundations and porch piers should be made.

The front porch should be repaired, with all broken and deteriorated members at both the floor and roof being replaced, and the lattices removed. Adequate earth-wood separation should be provided at the front porch, and sufficient crawl-space and ventilation provided for all other sub-floor areas. All other carpentry and repair should be done as may be required.

It does not appear feasible at this time to remove the added dormers and lean-to entrances, or to restore the original fenestration, as this would most likely preclude the continued use of this structure as a residence.

Any necessary structural repairs to the roof should be made as required. The metal shingles should be repaired, and the entire structure made watertight.

The cap of the remaining chimney should be rebuilt to its original appearance, and the other chimney reconstructed at least above the roof line if this can be accomplished without undue interference with the living spaces on the interior of the structure.

All painted surfaces should be repainted to their historic colors. See appendix, page 323 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Guard House			Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Yes	No	1	Probably finished. See item 4	No
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
	28' x 61'		1708 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
General Prison Rm. Guard Room Store Room Officer's Room Total	1 1 1 1 4	3 cells This information obtained from construction drawings only.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	 No	No information regarding utilities is shown on construction drawings. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER ~~FURNACE~~ / STOVES FIREPLACE	 1 1	No plumbing fixtures of any type indicated on construction drawings.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Stone	
CONSTRUCTION	18" rubble masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		Original
CONSTRUCTION	Wood trusses and purlins	
UNDERLAYMENT	Wood sheathing	
ROOFING	Metal shingles	
TYPE	Diamond Pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	White
REMARKS		Lattices at porch not original.

Building Number 10

Common Name: Duplex Residence

Historic Name: Commissary Storehouse

Adminstrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
PCP: B-517.
Drawings: National Archives: Record Group 393; NPS: 101/8104
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 10, Commissary Store and Office, Army No. 6

One and one-half story, frame building. Tin roof. Completed Dec. 5, 1891. Cost, $4,198. As originally planned it had one large storeroom, an office, and an issue room. In 1900, a contract in the amount of $1,198 was awarded to Alexander Lyall for an addition and alterations to this structure. In 1906, an inspector general reported that the basement was dark and damp. He recommended that there be a basement extrance from the outside. (As originally planned there was to have been an exterior trapdoor and steps leading to the basement.)

As of 1908, ordnance and signal corps supplies, as well as commissary supplies, were being stored in the building. In 1909, the salesroom (issue room) was enlarged from 14 by 14 feet to 32 by 14 feet. The increased strength of the post that year required the additional space. Not only did the troops acquire their rations there, officers' and sergeants' families and civilian employees were authorized to purchase groceries.

Present use: Residence.

Sources: "Early Pictures;" NA, RG 92, OQMG, consolidated File, Ft. Yellowstone, Box 1269, Contracts; NA, RG 343, Ft. Yellowstone, Letters Received, 1905-10, Lt. Col. Wilder, IG, inspection report, Nov. 10-14, 1906; NA, Cartographic Division, floor plans.

Architectural Data

Description of Historic Appearance and Conditions

This building is a one-story frame structure, rectangular in plan, with its long dimension running in a north-south direction. Initially, it measured approximately 30 feet by 50 feet, but the army later added a 30 by 32-foot addition. It has a gabled roof covered with metal shingles, and dormer ventilators to the attic on both sides of the roof. The walls were covered with rusticated wood siding, and the attic gables on the north and south ends of the building were covered with wood shingles. These gables also contained an attic ventilator and a pair of double-hung windows. There were smaller double-hung windows at the main floor, all of which had single-leaf shutters. There was also a small covered porch or loading dock on the east side of the original 30 by 50 building, and there was a basement at least under this original portion of the building as well.

See plate 42 for photograph of its historic appearance.

Description of Existing Appearance and Conditions

There have been some rather extensive alterations to the exterior appearance of this building during its conversion to residential use, although the basic shape, size, details, and materials are generally historic. Among these alterations have been the removal of the loading dock, the addition of lean-to entrance enclosures, replacement of the dormer louvers with windows, an almost one hundered percent alteration of the first floor fenestration, and some changes in location and numbers of chimneys.

The building appears to be structurally sound, and in good condition except for the roof. Some miscellaneous maintenance repairs are needed, such as the replacement of some of the wood gable shingles, etc. The original metal roofing shingles still remain, but are in need of some replacement and repair. The lean-to additions are roofed with rolled composition roofing.

The building is in need of paint, and the colors are not historic.

See appendix, plate 43 for a photograph of the existing appearance of this building.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Restoration of the historic appearance of this structure by removal of the additions and alterations which have been made would preclude its continued residential use.

All necessary maintenance repairs should be effected.

All roofing repairs should be done as required to make the building watertight and restore its historic appearance. The appearance of the building would be enhanced by roofing the lean-tos with metal shingles to match the rest of the structure.

All painted surfaces including the roof should be repainted to their historic colors. See appendix, page 323 for color schedule.

Recommended Further Study

Additional physical investigation of the roof is warranted to determine the nature and extent of repairs and/or replacement.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Commissary Storehouse			Duplex residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Yes	Yes			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
	30' x 82'		2460 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Office Issue Room Storeroom Total +Basement Storerm.	1 1 1 3 1	This information obtained from construction drawings only.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	 Probably No	No utilities are shown on the construction drawings. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER ~~FURNACE~~/ STOVES	 2	See items 4 and 5.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Stone	
CONSTRUCTION	18" Rubble Masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding Painted wood shingles @ gables	
COLOR	White siding, red shingles	Cream siding, green shingles
REMARKS		
ROOF		Original
CONSTRUCTION	Trussed rafters, wood sheath.	
UNDERLAYMENT		
ROOFING	Metal Shingles	
TYPE	Diamond pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream and green
REMARKS		

Building Number 11

Common Name: Duplex Residence

Historic Name: Quartermaster Storehouse

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
PCP: B-517.
Drawings: National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 11, Quartermaster Storehouse and Office, Army No. 7

One and one-half-story frame building. Tin roof. Completed 1891. Cost, $3,820. As planned, it had a large storeroom and a small office in one corner. Capacity was 8,000 cubic feet. In 1898, a contract for $1,040 was awarded to Nicholson & Lyall for an addition and alterations to the structure. The building was enlarged in 1910 by an addition that increased the length of the building by 32 feet. This addition contained more store space, a clothing room, and a large office for the Quartermaster Sergeant.

Present use: Residence.

Sources: "Early Pictures;" NA, Cartographic Division, floor plans and plans for 1910 addition.

Architecutral Data

Description of Historic Appearance and Conditions

This building was virtually identical to building 10 in historic appearance and construction. The only exterior differences were in slightly differing fenestration. Also, this building did not have a basement. Like building 10, its original dimensions were 30 feet by 50 feet, and like building 10, it was also given a 30 by 32-foot addition, so that the two buildings remained almost identical. It was situated to the east of and adjacent to building 10.

See appendix, plate 44 for photograph of its historic appearance.

Description of Existing Appearance and Conditions

This building continues to be almost identical to building 10 in appearance and conditions. With minor variations, the extent and type of alterations this building has undergone are the same.

See appendix, plate 45 for a photograph of the existing appearance of this building.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

This building should receive essentially the same treatment as recommended for building 10.

Recommended Further Study

Additional physical investigation of the roof is warranted to determine the nature and extent of repairs and/or replacement.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Quartermaster Storehouse			Duplex Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Yes	No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
	30' x 82'		2460 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Offices Clothing Room Store Room Total	2 1 1 4	This information obtained from construction drawings only.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	 Probably No	See item 4. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER ~~FURNACE~~ / STOVES	 1	See item 4.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Stone	
CONSTRUCTION	18" Rubble Masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	Painted wood shingles @ gables White siding, red shingles	Cream siding, green shingles
REMARKS		
ROOF		Original
CONSTRUCTION	Trussed rafters, wood sheath	
UNDERLAYMENT		
ROOFING	Metal shingles	
TYPE	Diamond pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream and green
REMARKS		

Building Number 12

Common Name: Duplex Residence

Historic Name: Granary

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
PCP: B-517.
Drawings: National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 12, Granary, Army No. 8

One and one-half-story, frame building. Tin roof. Completed Dec. 5, 1891. Cost, $1,560. One large storeroom. In 1908, it was reported to have a capacity of 300,000 lbs. or 12,000 cu. ft., which was considered inadequate for the needs of the post. Building apparently enlarged in 1910.

Present use: Residence.

Sources: "Early Pictures;" NA, Cartographic Division, floor plans.

Architectural Data

Description of Historic Appearance and Conditions

Like building 11, this building was also virtually identical to building 10 in historical appearance and construction, again differing only in fenestration. It was also originally built to the 30 by 50-foot dimensions and in 1910, it also acquired a 30 x 32-foot addition. This building was situated to the east of, and adjacent to building 11.

See appendix, plate 46 for photograph of its historic appearance.

Description of Existing Appearance and Conditions

This building also continues to be almost identical to building 10 in appearance and conditions. With minor variations, the extent and type of alterations this building has undergone are the same.

There is, however, one readily apparent difference. While the roof over the 1910 addition are covered with metal shingles, the shingles in this area only are of a different type and appearance than the typical diamond pattern shingle found throughout the rest of the post, with the exception of the Hospital Sergeant's Quarters, building 14, whose shingles match these. No photographic evidence has come to light to indicate whether these shingles are original, there is photographic evidence that the identical shingles on building 14 are indeed original, and it is therefore presumed that these shingles were installed at the time the addition was made.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

This building should receive essentially the same treatment as recommended for building 10.

Recommended Further Study

Additional physical investigation of the roof is warranted to determine the nature and extent of repairs and/or replacement.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Granary			Duplex Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Yes	No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
	30' x 82'		2460 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
	1	This information obtained from construction drawings only.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL		Unknown			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES					See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Stone	
CONSTRUCTION	18" Rubble Masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding Painted wood shingles @ gables.	
COLOR	White siding, red shingles	Cream siding, green shingles
REMARKS		
ROOF		Original
CONSTRUCTION	Trussed rafters, wood sheath	
UNDERLAYMENT		
ROOFING	Metal Shingles	
TYPE	Diamond pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream and green
REMARKS		

Building Number 13

Common Name: Jail

Historic Name: New Guard House

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
PCP: B-517.
Drawings: NPS: 101/8123.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 13, Guard House (new), Army No. 61

One-story, concrete building. Tile roof. Completed June 23, 1911. Cost, $16,348.

Present use: Jail.

Sources: "Early Pictures."

Architectural Data

Description of Historic Appearance and Conditions

This building is a one and one-half story building with concrete walls and a hipped roof of red clay tile. It is rectangular in plan, with a covered porch running the length of the building on the north side. The concrete walls were finished with cement plaster and left natural. The building was apparently designed for stone construction, and the details of the structure indicate such, although they were executed in concrete. The construction drawings tend to confirm this, but apparently stone proved too expensive. The drawings show the details in stone, but the building elevations indicate concrete walls, with stone as an alternate. Wood double-hung windows were used throughout, and bars embedded in the concrete cover the windows of the prison room and toilet. There were painted, as were the doors, casings, and metal gutters and downspouts, which also serve to trim out the roof.

See appendix, plate 48 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

The historic appearance of this building is intact, with no major exterior alterations.

The concrete walls and the chimney are spalling badly in some areas, and there are severe cracks in the concrete walls on the east side of the building. The cause of these cracks is unknown but there does not appear to have been any significant settlement of the building. There are a number of broken and deteriorating roof tile visible, and a strong possibility of badly deteriorated underlayment exists. Window sash, doors, and casings appear to be in generally good condition. The walls of the building have been painted, but none of the painted areas are to their historic colors.

See appendix, plate 49 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigation

None.

Recommended Treatment

The cracks in the wall should be sealed and patched. Broken and badly spalled areas should be repaired. The roof tile and underlayment should be repaired and/or replaced as necessary to make the building watertight. The paint should be removed from the concrete walls, as these walls refinished to their historic appearance. All painted items should be repainted to their historic colors.

See appendix, page 320 for color schedule.

Recommended Further Study

The roof will require additional investigation to determine the exact nature and extent of any necessary repairs.

Some investigation as to the causes of the severe wall cracks might be justified. The cracking which occurs in the stone walls of buildings in the area are more to be expected without undue concern for the stability of the soil. Such cracks are much less likely to occur in a monolithic structure such as this, and may be indicative of a more serious problem.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Guard House			Jail		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Not accessible	Yes			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	44' x 64'		2816 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Guard Room	1					
Prison Room	1					
Prison Toilet	1					
Guards Toilet	1					
Officer's Room	1					
Sergeant's Room	1					
Corridor (stairs)	1					
Tool Room	1					
Boiler Room	1					
Total	9					
5. UTILITIES		REMARKS			REMARKS	
WATER	Yes					
SEWER	Yes					
ELECTRICITY	Yes					
GAS / OIL	No	Coal				
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS	3					
LAVATORIES	3					
TUBS	1					
SHOWERS	1					
SINKS	1	Laundry				
WATER HEATER						
FURNACE / ~~STOVES~~	1					
URINAL	1					

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Concrete	
CONSTRUCTION	20" PIP wall, 10" x 26" ftg.	
FINISH	Cement plaster	Paint (above grade)
COLOR	Natural	Cream
REMARKS		
WALLS		Original
MATERIAL	Concrete	
CONSTRUCTION	18' PIP Wall	
FINISH	Cement plaster	Paint
COLOR	Natural (gray)	Cream
REMARKS		
ROOF		Original
CONSTRUCTION	Wood roof trusses supporting rafters, wood sheathing	
UNDERLAYMENT	Felt	
ROOFING	Clay tile	
TYPE	French	
COLOR / FINISH	Unglazed red	
REMARKS		
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red, white	Cream
REMARKS		

Building Number 14

Common Name: Residence

Historic Name: Hospital Steward's Quarters

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as a part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a.
PCP: B-517.
Drawings: None
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 2, HHA, WSC.

Historical Data

HS 14, Hospital Steward's Quarters, Army No. 23

One and one-half-story, frame structure. Tin roof. Completed June 30, 1894. Cost, $1,945. Just after it and the hospital were completed, a lady visitor to the park needed medical attention. G. L. Henderson, a local resident, escorted her to the hospital, "where I felt sure the intelligent stewart [sic], Henry Roepke, could compound a medicine. . . . We found the stewart and his family out on the lawn, under the shade of a tree." While Fort Yellowstone was still an active post, the hospital steward's title changed to hospital sergeant.

Present use: Residence.

Sources: "Early Pictures;" NA, Microcopy M 671, Post Returns; Yellowstone Archives, Ash Scrapbook, newspaper clipping, Aug. 17, 1901, by G. L. Henderson.

Architectural Data

Description of Historic Appearance and Conditions

This building is a two-story frame residence. It is almost square in plan, with a covered porch running the length of the west side. It has a gabled roof running north-south, and a transverse roof at the south end of the building with gables on both the east and west sides. The roof is covered with metal shingles. This is the only building whose metal shingles are not of the diamond pattern, with the exception of the addition to building 12, whose shingles match these. They are rectangular shingles with a semi-circular pattern embossed on them, and are laid in horizontal courses as opposed to the diagonal coursing of the diamond patterned shingles. A dormer on the west side of the roof at the second floor and north of the transverse gable was added by the army, and was sided with these shingles as well. The walls at the first floor and at the gables are covered with rustic siding. Wood double-hung windows were generally used throughout. The entire building, including the roof, was painted.

See appendix, plate 50 for photograph of its historic appearance.

Description of Existing Appearance and Conditions

The historic appearance of this building is intact, with only minor exterior alterations. These include some fenestration changes, and the enclosure of the rear porch on the east side of the building.

There has been some deterioration of the stone foundation, especially in the area of the rear or east porch. The framed portions of the building appear to be sound, with siding, trim, and sash in generally good condition. The bulk of the roof is still covered with the original metal shingles. However, these shingles have been removed from the front porch and a portion of the dormer, and these areas are now covered with sheet metal. The chimney has been rebuilt, and is no longer to its historical configuration. The paint colors are also no longer historic.

See appendix, plate 51 for a photograph of its existing appearanc

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

The foundation should be repaired as required. There is a strong possibility of inadequate ventilation and space beneath the front porch floor. This should be investigated and corrected if necessary.

Any additional carpentry and repairs should be effected. The rear porch enclosure should be removed and restored to its original appearance. This should be possible without affecting the use of the structure. If, however, this enclosure is deemed necessary, particularly during winter months, perhaps it could be replaced with a temporary enclosure which could be removed during the tourist season. This enclosure, as it stands, detracts from the appearance of the building, and improvement of this condition should be in the nature of restoration.

The chimney should be rebuilt to its original configuration, and the sheet metal roofing over the front porch and at the dormer should be removed and replaced with metal shingles to match the original. All necessary additional repairs should be made to the roof, and the entire building made watertight.

All painted surfaces should be restored to their historic colors. See appendix, page 324 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Hospital Steward's Quarters			Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	No	Unknown			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	27' x 30'		810 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
		Unknown			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER	Yes	Probable			See item 4.	
SEWER	Yes					
ELECTRICITY	Yes					
GAS / OIL	No	Coal/wood				
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS		Unknown			See item 4.	
LAVATORIES						
TUBS						
SHOWERS						
SINKS						
WATER HEATER						
FURNACE / STOVES						

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		Original
MATERIAL	Stone	
CONSTRUCTION	Rubble masonry	
FINISH	Natural	
COLOR	Natural (gray)	
REMARKS		
WALLS		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		Original
CONSTRUCTION	Wood frame	
UNDERLAYMENT		
ROOFING	Metal Shingles	Some shingles removed - replaced with sheet metal
TYPE	Embossed rectangular	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		Original
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		
DORMER		Original
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted metal shingles	Some shingles removed - replaced with sheet metal
COLOR	Red	Green

Building Number: 16

Common Name: Residence

Historic Name: Hospital Annex

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: None
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA, WSC.

Historical Data

HS 16, Hospital Annex, Army No. 55

One-story, frame building. Shingle roof. Completed June 30, 1909. Cost, $9,814. Four rooms,

capacity of 12 men. Built as quarters, etc., for personnel assigned to hospital duty. In 1916 the Army referred to this structure as the "old" annex, and mentioned also the "new" annex. No number was given for the "new" annex; it was listed along with the new hospital.

Present use: Residence
Sources: "Early Pictures"

Architectural Data

Description of Historical Appearance and Conditions

This building is a single-story frame structure, rectangular in plan, with a gabled roof. On the east side, there is an apparent addition, covered by a roof of lesser slope than the gabled portion. This addition does, however, date to the Army period. A covered porch which extends across the southern end of the building is known to be at least twenty-five years old, but it is not known if it is an original part of the structure. On the north side of the building, there was a simple covered entrance stoop, and it is probable that this was the only entrance, and that the porch came later. The walls were covered with rusticated siding, and the roof with wood shingles. Wood double-hung windows were used throughout. The walls, sash, and trim were painted, but the roof treatment is unknown.

See Appendix, plate 52 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

This building retains its basic shape, materials, and construction, but there have been a number of alterations. As mentioned above, it is not known whether the porch extending across the south end of the building is part of the historic structure, but there is some evidence to suggest tha this may

not be original. There have been a number of fenestration changes, and a further addition to the structure has been made on the east side. The entrance on the north side has been altered. The building is still roofed with wood shingles, but the horizontal shadow-line application is not an original detail.

The building appears to be in generally sound condition. The Army buildings register (item 167, Yellowstone Archives) indicates that the foundations were originally wood (type unknown). Historical photographs do not show these foundations, as the subfloor area was enclosed with wood siding, a condition which continues to exist, apparently in its original material. No investigation of this condition was made due to the inaccessability of the area.

The siding, sash, and trim are in good condition. Most of the windows, although apparently the original sash, have been lowered and some have been closed in. The eave at the west elevation has been cut back to accommodate the trunk of a large tree, but this appears to be an early condition of the building. The paint colors are not historic.

See Appendix, plate 53 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

Evidence of the windows having been lowered and some closed in is visible in the exterior siding. The porch at the south end of the structure apparently has a concrete foundation, in contrast to the apparent wood supports of the rest of the structure. Investigation of these conditions was not pursued due to their relative inaccessibility, but further investigation could probably determine the true facts. If this is true, however, it may

indicate that this porch is not original.

Recommended Treatment

The above-mentioned foundation conditions should be investigated if for no other reason than to determine their soundness, and any deficiencies should be corrected. Any additional carpentry and miscellaneous repairs should be made. The building should be repainted to its historic colors. The roof should be investigated and such repair made as to make it watertight; at such time as the building may require reroofing, the horizontal shadow lines should be eliminated.

It would appear that restoration of the historic appearance of this structure by removal of the additions and alterations which have been made would preclude its continued residential use. It is therefore recommended that these alterations be allowed to remain, but that no further exterior alterations be allowed.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Hospital Annex			Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1					
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing Total	25'x 49' 10'x 15'		1225 SF 150 SF 1375 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
	4	Room usage unknown			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	Probable			See item 4	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		Unknown			See item 4	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		
MATERIAL	Wood	
CONSTRUCTION	Unknown	
FINISH		
COLOR		
REMARKS		
WALLS		
MATERIAL	Wood	ORIGINAL
CONSTRUCTION	Frame	
FINISH	Painted..rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		
CONSTRUCTION	Wood frame	
UNDERLAYMENT		
ROOFING	Wood shingles	Wood shingles-not orig
TYPE		
COLOR / FINISH	Unknown	Green paint
REMARKS		
TRIM		
MATERIAL	Wood	ORIGINAL
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 17

Common Name: Chapel

Historic Name: Chapel

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Preservation. The interior as well as the exterior of this building should be preserved.

Operating Provisions

Continued National Park Service maintenance for use as an interdenominational chapel.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8122
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone, Vol. 3, HHA,WSC.

Historical Data

HS 17, Chapel, Army No. 29

Native stone. Slate roof. Oak furnishings. Completed January 8, 1913. Cost, $21,000 - 23,000.

Aubrey L. Haines has written an excellent study on this structure, A History of the Yellowstone National Park Chapel (1913-1963), Yellowstone NP, 1963. As early as 1897, citizens were writing the acting superintendent urging the erection of a chapel. But at that time the Army had no policy for chapels at every post. While a few posts did have chapels, most had a general-purpose building that served as a chapel on Sundays (right after the Saturday night ball). However, by 1909, enough pressure had been put on the War Department and the Congress that a special appropriation of $25,000 was authorized for Yellowstone.

Construction began in the spring of 1912, Gagnon & Co., Billings, Mont., having got the contract. It was dedicated June 25, 1913. A bell was added in 1928. In 1939, a donor provided two stained glass windows. In 1954, the heating system was converted from coal to fuel oil. The extra space created in the basement was then converted to Sunday School use. The building was repointed in 1960. In 1961, a new maple floor was laid, the interior painted, and the woodwork stained and varnished. In 1962, restrooms were constructed in the basement and a stone entry-way was built over the stairwell leading to the basement.

Haines writes that the interdenominational ministry in the national parks and national forests, sponsored by the National Council of Churches of Christ, may be said to have started at the Yellowstone Chapel.

Present use: Chapel

Sources: "Early Pictures;" Aubrey L. Haines, A History of the Yellowstone National Park Chapel. (1913-1963)

Architectural Data

Description of Historic Appearance and Conditions

This building is a one-story structure with walls of local sandstone and a pitched roof supported by wooden trussed arches and roofed with slate shingles. It has a simple design with pleasing details and proportions.

The stone construction is coarser than that of the other stone buildings on the post. The stones are roughly squared and coursed as opposed to the ashlar construction found elsewhere, and the finished stone is hand-tooled rather than machine finished.

Among the more salient exterior features of the buildings are the stone buttresses which receive the loads from the roof trusses, the gothic-arched window, and the stone cross on the west wall above the entrance vestibule. The entrance, sanctuary, nave, and vestry are each clearly articulated on the exterior.

The interior of the building is finished with plaster on the walls, and stained and varnished wood floors, ceilings, and trussed arches. The windows are of the horizontally pivoted type, with wood casings and leaded glass set in a diamond pattern. The rather unique lighting consists of bare light globes in porcelain sockets mounted on the sanctuary side of the trussed arches. Modest oak pews and finely carved and detailed railings, lectern, pulpit, altar, and a simple wooden cross complete the interior fittings.

See Appendix, plate 54 for a photograph of its historic exterior appearance.

Description of Existing Appearance and Condition

The historic appearance of this building is generally intact, both inside and out. The major changes which affect the historic appearance are

the addition of a bell tower over the organ space, the construction of a cover over the exterior steps to the basement, and the installation of two stained glass windows at the entry vestibule. Extensive remodeling has been done to the basement, but this in no way affects any part of the building normally seen by the public.

This building is sound and in good condition, with the exception of the composition shingles covering the roofs of the bell tower and basement entrance.

See Appendix, plate 55 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Continued maintenance is the only major treatment recommended. The additions (the basement entrance enclosure and the bell tower) are pleasing and compatible with the structure, serve useful functions, and do not significantly detract from the historic appearance of the structure. They should therefore remain. It is recommended that the deteriorating composition shingles be removed from these areas and that they be replaced with slate tile to match the rest of the structure.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Chapel			Chapel		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	No	Yes	1	No	Yes
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	89'x 41'		3649 SF	Same		
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Vestibule(porch)	1			1		
Nave(auditorium)	1			1		
Choir	1			1		
Organ alcove	1			1		
Sanctuary	1			1		
Vestry	1			1		
Mech.Rm.(basemt)	1			1	The basement has been remodeled with classrooms added. No count was made.	
Total	7					
5. UTILITIES		REMARKS			REMARKS	
WATER				Yes		
SEWER				Yes		
ELECTRICITY	Yes			Yes		
GAS / OIL	No	Coal				
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS						
LAVATORIES						
TUBS						
SHOWERS						
SINKS						
WATER HEATER						
FURNACE / ~~STOVES~~	2	Coal-fired, hot air				

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	18" and 24" masonry	
FINISH	Natural	
COLOR	Gray	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	18" and 24" coursed masonry	
FINISH	Roughly squared *	
COLOR	Gray(natural)	
REMARKS	* Rough faced-hand tooled at sill, lintels,etc.	
ROOF		ORIGINAL
CONSTRUCTION	Trussed arches and purlins at vestry and vestibule-	s at nave,framed rafters wood sheathing throughout
UNDERLAYMENT		
ROOFING	Slate shingles	
TYPE	3/16" x 9" x 18"	
COLOR / FINISH	Gray(natural)	
REMARKS		
TRIM		ORIGINAL
MATERIAL	Wood	
FINISH	Paint	
COLOR	White	
REMARKS		

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
8. INTERIOR CONST.		
FLOORS	UNKNOWN-SIMILAR	
MATERIAL		Wood(maple), (Conc. at vestibule, basemt.)
CONSTRUCTION	Framed	Framed
FINISH		
COLOR		Clear
REMARKS		Replaced 1961
WALLS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Masonry	
FINISH	Plaster	
COLOR		Cream
REMARKS		
CEILINGS		ORIGINAL
MATERIAL	Wood	
CONSTRUCTION	Paneled	
FINISH		Stain/varnish
COLOR		Brown/clear
REMARKS		
TRIM / CASEWORK		ORIGINAL
MATERIAL	Wood	
FINISH		Stain/varnish
COLOR		Brown/clear
REMARKS		Horizontally pivoted windows, leaded window panes, diamond pattern, clear glass.

Building Number 19

Common Name: Storage Shed

Historic Name: Coal Shed

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: Q.M.G.O. 67B
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA, WSC

Historical Data

HS 19, Coal Shed, Army No. 42

One-story, frame building. Tin roof. Completed October 31, 1903. Cost, $4,500. Contractor, Alexander Lyall. Reported in 1908 to have a capacity of 1,200,000 pounds of coal.

Present Use: Shop
Sources: "Early Pictures"

Architectural Data

Description of Historical Appearance and Conditions:

This building is a one-story frame building, rectangular in plan, running in a north-south direction. It has stone foundations, walls covered with rusticated wood siding, and a shed roof originally covered with tin roofing. It had a large wagon-sized openings on the north and east sides, and window-sized openings on the west side, covered with sliding shutters. There was also an open loading platform at the center of the east elevation. A portion of the wall siding was canted at grade, this apparently being necessary to cover the top of the foundation wall. The entire structure was painted.

See Appendix Plate 58 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions:

The basic structure and shape of the building remains. The building has undergone extensive fenestration changes to the extent that the original purpose of the structure is no longer readily apparent. The present roofing material is not known, but all other materials appear to be or to match the original. The paint colors are no longer historic.

See Appendix Plate 59 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations:

None.

Recommended Treatment:

Extensive restoration of the original fenestration is required. This may also necessitate some extensive interior restoration. The building appears to be structurally sound, but requires some general

maintenance repair and painting to historic colors.
See Appendix , page 319 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Coal Shed			Storage		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	no	no			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	22' x 160'		3520 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
		Unknown			No physical investigation of the interior was made.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL		Unknown - probably none.			See item 4	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		See item 5			See item 4	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble Masonry	
FINISH	Rough	
COLOR	Natural (gray)	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Wood	
CONSTRUCTION	Frame	Extensive fenestration alterations.
FINISH	Painted rustic siding	
COLOR	Red	Cream
REMARKS		
ROOF		ORIGINAL CONSTRUCTION
CONSTRUCTION	Wood frame	
UNDERLAYMENT		
ROOFING	Tin	Unknown
TYPE	Sheet	
COLOR / FINISH	Unknown	
REMARKS		
TRIM		ORIGINAL AT CORNERS, EAVES, WATERTABLES, ETC.
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 20

Common Name: Storage Shed

Historic Name: Hay Shed

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: None
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA, WSC.

Historical Data

HS 20, Hay Shed, Army No. 15

One-story, frame building. Shingle roof. Completed

December 31, 1893. Cost, $1,275. In 1908 it was reported as having a capacity of 270,000 pounds of hay and straw, which was considered inadequate. Originally 100' x 24', it was enlarged by a 79 foot addition in January, 1910.

Present Use: Storage
Sources: "Early Pictures"

Architectural Data

Description of Historic Appearance and Conditions

In its earliest state, this building was a one-story frame building, rectangular in plan, with approximate dimensions of 24-feet by 100-feet. This structure had stone foundations, rusticated wood siding, and a hipped roof covered with wood shingles. In 1910, a 24 by 79-foot addition was made. This addition also had stone foundations, rusticated wood siding (although this was of a different type than that used on the first section), and while the roof pitch and eave height matched that of the first section, it had a gabled end on the north side. This later section also steps up the slope upon which it is situated, with the result that the floor level of the northernmost portion of the structure is considerably higher than the rest. Loading platforms extended along the east side of the building, and the openings were covered by large sliding doors. The entire structure, with the possible exception of the roof, was painted.

See Appendix plates 60 and 61 for photographs of its historic appearance.

Description of Existing Appearance and Conditions

The basic structure and shape of the building remains. It has undergone extensive fenestration changes, and most of the loading dock along the east elevation has been removed. The building still retains

its unique combination of hipped and gabled ends at its roof, and while it is still roofed with wood shingles, the horizontal shadow-line application is not an original application detail. The paint colors are no longer historic.

See Appendix plate 62 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Extensive restoration of the original fenestration is required, and the loading docks along the east side should be reconstructed. The horizontal shadow-line effect should also be removed from the roofing, and the entire building repainted to its historic colors. See Appendix, page 319 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Hay Shed			Storage Shed		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	No	No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	24' x 179'		4296 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
		Unknown			No physical investigation of the interior was made.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL		Unknown - probably none.			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		See item 5.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble Masonry	
FINISH	Rough	
COLOR	Natural (gray)	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Wood	Extensive fenestration alterations.
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	Red	Cream
REMARKS		
ROOF		ORIGINAL CONSTRUCTION
CONSTRUCTION	Wood frame	
UNDERLAYMENT		
ROOFING	Wood shingles	Wood shingles, not original application.
TYPE		
COLOR / FINISH	Unknown	No finish
REMARKS		
TRIM		ORIGINAL AT CORNERS, EAVES, WATERTABLES, ETC.
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 22

Common Name: Shops

Historic Name: Q.M. Shop, Plumber Shop, Saw Mill, Engine House

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Demolition. See proposals contained in the Historic and Architectural Data sections of this report.

Operating Provisions

Continued National Park Service maintenance and operation until demolition.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: None
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA, WSC.

Historical Data

HS 22, Quartermaster Shops, Army Numbers 33, 34, and 39

One-story, frame building. Shingle roof. That section of the overall structure that the Army called

Building No. 33 was completed October 30, 1893. The other two sections were added later, apparently at different times. The functions of this complex of rather poorly built structures changed from time to time. Army No. 33 was generally considered to be the Quartermaster Shop Building. It had a carpenter and a blacksmith working in it in 1909. Army No. 34 had a Plumber Shop in it in 1909.

No. 33 was 28 x 54 feet and sat on wooden posts. No. 34 was 18 x 20 feet and sat on stone foundations. No. 34 cost $200; No. 39 cost $1,175.

In 1899, the post commander mentioned that the school for children at the post was then being held "in an old building formerly used a a carpenter shop." Whether this was one of the above is not known.

By 1916, No. 39 contained a sawmill.

Sources: "Early Pictures"

Architectural Data

Description of Historic Appearance and Conditions

This one-story frame structure was originally made up of three separate and rather poorly constructed buildings. It had stone foundations, frame walls with rusticated wood siding, and a gabled roof covered with wood shingles. It was not beautiful, to say the least.

See Appendix plate 63 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

Remodeling and repair by the National Park Service have vastly improved the condition and appearance of this structure, though it now bears little resemblance to its original appearance except in general shape and construction. There have been numerous fenestration changes and the building has been re-roofed.

See Appendix plate 64 for a photograph of its exisitng appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Demolition. It is felt that this building has no significant historical, architectural, or useful value, and that the area would be considerably enhanced by its removal.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Shops					
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1					
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Q.M. Shop Plumber Shop Saw Mill	28'x 54' 18'x 20' 20'x 50' Total		1512 SF 360 1000 2872 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
		Unknown			No physical investigation of the interior was made.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL		Yes			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		Unknown			See item 4	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble Masonry	
FINISH	Rough	
COLOR	Natural (gray)	
REMARKS		
WALLS		
MATERIAL	Wood	ORIGINAL
CONSTRUCTION	Frame	Extensive fenestration alterations.
FINISH	Painted rustic siding	
COLOR	Red	Cream
REMARKS		
ROOF		
CONSTRUCTION	Wood frame	PROBABLY ORIGINAL CONSTRUCTION
UNDERLAYMENT		
ROOFING TYPE	Wood shingle	Wood shingle
COLOR / FINISH	Probably unfinished	Unfinished - not original application.
REMARKS		
TRIM		
MATERIAL	Wood	PROBABLY ORIGINAL AT CORNERS, EAVES, WATERTABLES, ETC.
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 24

Common Name: "Biastock House"

Historic Name: Bakery

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Undetermined. See proposals contained in the Historic and Architectural Data sections of this report.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8104, 8215; National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA, WSC.

Historical Data

H 24, Bakery, Army No. 9

Also called the Biastock House. Originally a one-story, frame building, 20 x 18 feet. Completed 1891.

Cost $1,500. The plans called for a workroom containing a kneading table and a sink, a storeroom, and a 16 by 10 1/2 foot space for two ovens.

In 1899, the post commander recommended that a room be added as quarters for the baker. At that same time the bakery could produce 250 rations per day and was in good repair. The bread was said to be good. But in 1908 a medical officer said that the bread was terrible.

The bakery was a matter of correspondence in 1909 when Major Benson ordered the Quartermaster "to have removed without delay the small building used as a 'rear' behind the Post Bakery and to have the site properly filled in and policed." The NPS moved the building to its present site in 1934.

Present Use: Residence

Sources: "Early Pictures;" NA, RG92, OQMG, Consolidated File, Fort Yellowstone, Box 1269, Lt. Col. T. Wint, IG, Aug. 20, 1899, to CO, Fort Yellowstone; RG393, Fort Yellowstone, Letters Received, 1905-10, Box 3, 1st Lt. J.M. Wheate, Sept. 21, 1908, to Adj., Fort Yellowstone; and Box 5, 1st Lt. C.F. Martine, June 29, 1909, to 1st Lt. E.J. Ely.

Architectural Data

Description of Historic Appearance and Condition

This building was a one-story rectangular structure of frame construction with rusticated wood siding and a gabled roof covered with metal shingles. It had no outstanding distinguishing features. Wood double-hung windows were used throughout. The entire structure, including the roof, was painted.

See Appendix plate 65 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

In 1934, the Park Service moved this structure to its present location on the eastern edge of the terrace. A wing was added to the structure at this time, and it was converted to residential use. It remains unchanged in appearance from the time of that remodeling, but it bears little resemblance to the original structure, and it is some distance away from its original location. Even at the time of its moving, there had already been a number of fenestration changes made. The basic framework, siding, trim, and roof of the original structure still remain. The metal roofing of the structure was also retained, and the added wing was roofed with like material.

See Appendix plate 66 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

From an architectural standpoint, at least, no recommendation can be made for restoration or preservation. The building is so far removed from its original site and so altered in appearance that it can add nothing to the historical scene, and is, in fact, an intrusion upon it. While the building could be restored to its original appearance, it cannot be restored to its original location, as apartment building 70 now stands upon this site.

It is therefore recommended that this building be allowed to remain in its present location and appearance until it has exhausted its useful life and then be demolished.

Consideration should be given, however, to repainting it to its historic colors in order to be compatible with the other nearby historic structures to be retained. See Appendix page 315 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Bakery			Residence		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1		No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	20'x 28'		560 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Baking Room	1				No physical investigation of the interior was made.	
5. UTILITIES		REMARKS			REMARKS	
WATER	Yes					
SEWER	Yes					
ELECTRICITY	Yes					
GAS / OIL	No					
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS						
LAVATORIES						
TUBS						
SHOWERS						
SINKS	1					
WATER HEATER						
FURNACE / STOVES						
Baking Ovens	2					

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		
MATERIAL	Stone	Concrete
CONSTRUCTION		PIP
FINISH		
COLOR		
REMARKS		
WALLS		ORIGINAL
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		
CONSTRUCTION	Wood Frame	ORIGINAL
UNDERLAYMENT		
ROOFING	Metal Shingles	
TYPE	Diamond Pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		
MATERIAL	Wood	ORIGINAL
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 25

Common Name: Carpenter Shop

Historic Name: Cavalry Stables

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building should receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: National Archives, record group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA,WSC

Historical Data

HS 25, Cavalry Stable, Army No. 10

Frame building. Completed December 5, 1891. Cost $5,987. Oldest of the stables still standing

at Fort Yellowstone. Capacity: 88 horses. No storage. Plans called for a small room in each of the four corners of the building.

Present Use: Vehicle storage.
Sources: "Early Pictures;" NA, Cartographic Division, plans.

Architectural Data

Description of Historic Appearance and Conditions

This structure is a one-story building of frame construction with rusticated wood siding and a gabled roof. In plan, the building is an elongated rectangle, running north and south. The plan and features of the building are symmetrical about both the major and minor axis. The roof was covered with metal shingles, and had a series of seven ventilating dormers extending along its length on both the east and west sides. The gables at each end were covered with wood shingles, and each had a window with an "eyebrow" at the head. A pair of 5 x 12-foot doors at both ends constituted the major entrances, with smaller single doors at the center of the building. There were four double-hung windows, one at each corner of the building, and a series of smaller glazed openings, probably of the "hopper" type along the length of the building on each side. The entire building, including the roof, was painted.

See Appendix plate 67 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

This building retains much of its original shape, materials, details, and construction. It has, however, undergone extensive fenestration changes and has acquired some additions on the east side. The windows have been removed and a series of double doors installed along the west elevation for about the northern two-thirds of the building, and the area

used for materials storage. Extensive fenestration changes have been made at the south end of the building, which now houses the carpentry shop. A series of small buildings form a wing to the east in this area.

The original roof structure is still intact, however, as are the dormers, metal roofing, shingled gables, trim, etc. The north elevation of the structure is basically intact, as is much of the east elevation, with the exception of the aforementioned added wing. The building appears to be in good condition, with some general maintenance repairs being required. The metal roofing will need considerable attention and possible replacement. The paint colors are no longer historically accurate.

See Appendix plate 68 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

It is recommended that this building be eventually restored to its historic appearance. It is an important part of the historic scene and could be adapted to storage use for either the Park Service or Park Service employees even though its exterior appearance be restored.

Until such time as the complete exterior restoration becomes practical, it is recommended that all necessary repairs and such restoration as can be made at this time be accomplished. This would include any needed repairs to the foundation, siding, trim, roofing, etc. and repainting to historic colors. See Appendix page 318 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Cavalry Stables			Carpentry Shop & Storage		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	No	No	1	No	No
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	30'x 198'		5940 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Stable Tack Rooms	1 4	This information obtained from construction drawings only.			No physical investigation of the interior was made.	
Total	5					
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes	This information obtained from Army Buildings Register Item 167 Yellowstone Park Archives			See item 4	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		Unknown			See item 4	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble Masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		ORIGINAL
CONSTRUCTION	Wood frame	
UNDERLAYMENT		
ROOFING	Metal Shingles	
TYPE	Diamond Pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		ORIGINAL
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 27

Common Name: Warehouse

Historic Name: Troop Barracks

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8114
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA, WSC.

Historical Data

HS 27, Cavalry Barracks, Army No. 28

One-story, frame building. Tin roof. Completed in 1897. Cost, $13,187. As originally built, had a

capacity of 68 men: two dormitories, company store room, orderly room, day room, mess room, kitchen, pantry, lavatory, and cook's room. Six fireplaces. Today it is the oldest barracks standing. At the time this building was being constructed, Colonel Young wrote: "Pressed clay for bricks necessary for chimneys ... is found at this point on road one mile inside north boundary of park." Whether this "pressed" clay was used is unknown.

In 1909, a basement was constructed under one wing. The kitchen, dining room, and lavatory were moved to this basement. The space they had occupied previously was remodeled into a dormitory, increasing the capacity of the barracks to 100 men. Cost of this work, $6,250.

Present Use: Warehouse

Sources: "Early Pictures;" NA, RG393, Fort Yellowstone, Letters Received, 1905-1910, Box 3, Captain De Witt, Surgeon, July 4, 1908, to Adj., Fort Yellowstone; Yellowstone Archives, Letters Sent, 6, 1896-97, Young, July 14, 1897, to AG.

Architectural Data

Description of Historic Appearance and Conditions

This building is a one-story frame structure consisting of a main dumbbell-shaped wing running north and south, a smaller parallel wing to the east or rear, and connecting wing between the two. The main wing had a hipped roof, the rear wing a gabled roof, and the entire structure had metal shingle roofing. The building is symmetrical about an east-west axis. There is a covered veranda extending along the entire west elevation, the north and south ends of the main wing, and returning along the east elevation of the main wing for about one-quarter of its length at each end. The roof of this veranda is integral with the hipped roof, but decreasing in pitch in this area. There are four hipped attic dormers on the west side of the main wing, and two on the east; there are also two louvered cupolas at the

ridge of this wing. An uncovered porch ran along a portion of the east side of the rear elevation. The walls are covered with rusticated wood siding throughout with the exception of the gables at the east wing, where wood shingles were used. Wood double-hung windows were used throughout except at the dormers. The entire building, including the roof, was painted. A basement was added to the structure under the east and connecting wings by the Army in 1909.

See Appendix plate 69 for a photograph of its historical appearance. See also plate 16 for photograph of the historic appearance of its twin structure, building 26, now demolished.

Description of Existing Appearance and Conditions

The historic appearance of this building is generally intact, with no major exterior alterations.

The foundations appear to be in good condition, although there is a possibility of inadequate crawl-space ventilation, which should be investigated.

Some alterations have been made in order to accommodate the building's present warehouse function: the porch at the south end has been altered and reinforced for loading dock use; double doors have been installed at the north and south ends of the main wing, and a garage door has been installed on the south side of the connecting wing. There have also been a number of window changes. The porch at the rear wing has been roofed over.

The chimneys are apparently original and intact, but are suffering from some deterioration.

The main wing still retains its metal shingle roofing, but it is not in good condition; the rear and connecting wings have been re-roofed with wood shingles. The building is in need of paint, and present paint colors are not historic.

See Appendix plate 70 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

At such time as the warehouse function can be eliminated from this building, it should be restored to its historic appearance and converted to use as a community building or other similar and appropriate use. It would be ideally suited to such usage, due to its central location and proximity to the gymnasium and the present playground, which could be relocated on the site of the first barracks, building 26, once the vehicle fueling and storage function of the area is relocated. The interior spaces would also lend themselves to such functions, and important interpretive functions might also be well served by such usage, as it would easily lend itself to at least partial interior restoration. Barracks life was certainly one of the most important aspects of army duty at Fort Yellowstone, and not only is a great deal of the interior still intact, it is one of the few buildings of which we have an indication of the historical interior appearance. See Appendix plate 71 . Until such time as this can be accommodated, it is recommended that all necessary repairs and such restoration as can be made at the present time be accomplished.

Adequate sub-floor ventilation should be provided, and all foundations repaired as may be required. All necessary repairs to siding, sash, trim, chimneys, etc., should be made. All metal shingles should be repaired and/or replaced as may be required, and all wood shingles replaced with metal shingles to match the original; the entire structure should be made water-tight. The building should be repainted to its historic colors. See Appendix page 285 for color schedule.

Eventual complete exterior restoration will also require the removal of the added doors and windows, removal of the steps and heavy-duty flooring at the south end of the veranda, and possibly removal of the roof over the east porch.

Recommended Further Study

The above proposals will almost certainly require additional study as to the feasability and/or desirability of such treatment in the light of interpretive possibilities, historic value, and the effects upon the community.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Cavalry Barracks			Warehouse		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Yes	Yes-added	1	Yes	Yes
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing East Wing Connecting Wing Total	42'x153' 26'x63' 24'x27'		6426 SF 1638 648 8712 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Dormitories Store Room Orderly Room Day Room Vestibules Corridors Lavatory Mess Room Kitchen Cook's Room Pantry	2 1 1 1 4 2 1 1 1 1 1	This building had 3 dorm rooms after the 1909 remodeling. This information obtained from construction drawings only. Total Rooms = 16			No detailed physical investigation was made.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	See item 4. Coal/wood			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER ~~FURNACE~~ / STOVES URINALS FIREPLACES	5 6 4 1 1 2 3 6	See item 4.			See item 4	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble Masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		ORIGINAL
CONSTRUCTION	Wood trusses and purlins	
UNDERLAYMENT	Wood sheathing	
ROOFING	Metal Shingles	Wood shingles at east and connecting wings only.
TYPE	Diamond Pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 28

Common Name: Garage

Historic Name: Cavalry Stables

Administrative Data

Order of Significance

This building is non-classified.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/2086; Q.M.G.O. : 139E; National Archives: record group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA,WSC

Historical Data

HS 28, Cavalry Stable, Army No. 47

Frame, concrete floor. Tin roof. Completed in 1907. Cost, $16,729. This building replaced a set

of cavalry stables that had been built on the same site in 1897, but which was destroyed by fire in 1907. This new building was more than twice as wide but shorter than the structure it replaced. Capacity: 84 animals and 30,000 cubic feet of storage. Besides the four rows of stalls, it had two harness rooms, a store room, and an officers saddle room.

Present Use: Vehicle maintenance

Sources: "Early Pictures;" NA, RG393, Fort Yellowstone, Letters Received, 1905-10, "Proceedings of a Board of Investigation Convened Pursuant to... SO No. 15;" NA, Cartographic Division, plans for electrical wiring, 1908.

Architectural Data

Description of Historic Appearance and Condition

This building was a two-story frame structure housing stables on the main floor and hay and grain storage in the loft. The walls were covered with rusticated wood siding. It had a gabled roof over the clerestory at the loft, and shed roofs over the wings on either side, all covered with metal shingles. It had a rectangular plan with its major dimension in a north-south direction, and was generally symmetrical about both its major and minor axis. A series of ventilator-light combinations extend along both sides of the clerestory. Two large doors at either end of the building constitute the major entrances to the building, with smaller doors at approximately the middle of the east and west sides. There was also a loft door and hoist at either end. Wood double-hung windows were used at the south end of the building in the harness and store rooms, and smaller windows, probably of the "hopper"type were used elsewhere. The entire structure was painted.

See Appendix plate 72 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

This building has been extensively altered, with little but the original cross sectional appearance remaining. Approximately 50-feet of the south end of the building were removed by the National Park Service to make way for building 23. The entire west elevation of the remaining building was opened and converted to vehicle stalls, some open and some enclosed with garage doors. The south end of the building has been enclosed with rather crude siding; the north end has had the loft and westernmost doors closed in and a new, larger door installed in the center, with both it and the one remaining door now sporting overhead garage doors; the east elevation has also undergone some changes, though less severe. The roof is now covered with wood shingles. The paint colors are no longer historic. Enough of the original appearance remains to identify it as having once been a stable, but little more.

The physical condition of the building appears to be good, requiring some general maintenance and in need of paint.

See Appendix plate 73 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

As it stands the significant historical value of this structure is to help complete the mental image of a line of stables extending along the east side of the post. However, this image is also helped by building 23, a garage structure similar in appearance to the stables, but nevertheless an intrusion upon the historic scene. Its removal would open a gap that could only be filled by reconstruction of building 28. Although such reconstruction would be

costly, it is vital to a strong interpretive program.

Until such time as restoration or demolition can be effected, it is recommended such maintenance repairs as may be required be accomplished, and the building be repainted to its historic colors. See Appendix page 318 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Cavalry Stables			Garage & Wash Rack		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Hay and feel loft	No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	66'x 138		9108 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Stable Harness Rooms Saddle Room Store Room Loft Total	1 2 1 1 1 6	84 stalls This information obtained from construction drawings only.			No physical investigation of the interior was made.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes	This information obtained from item 167, park archives.			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		Unknown			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		ORIGINAL STRUCTURE
CONSTRUCTION	Wood Frame	
UNDERLAYMENT		
ROOFING	Metal Shingles	Wood shingles
TYPE	Unknown	
COLOR / FINISH	Red - Painted	Unfinished
REMARKS		
TRIM		
MATERIAL	Wood	Wood
FINISH	Paint	Paint
COLOR	Red	Cream
REMARKS		Some original trim remains, but alterations have removed much of it.

Building Number: 29

Common Name: Paint Shop

Historic Name: Troop Workshops

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Undetermined. See proposals contained in the Historical and Architectural Data sections of this report.

Operating Provisions

Continued National Park Service maintenance and operation unless or until demolished.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: Q.M.G.O. plan No. 59E
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data Book, Fort Yellowstone Vol. 3, HHA, WSC.

Historical Data

HS 29, Troop Workshop, Army No. 38

One-story, frame building. Shingle roof. Completed 1901. Cost, $1,635. Contractor, Alexander

Lyall. In 1909, there were two troop workshops in the building.

Present Use: Paint Shop
Sources: "Early Pictures"

Architectural Data

Description of Historic Appearance and Conditions

This building is a one-story frame structure with rusticated wood siding and a gabled roof covered with wood shingles. It was originally rectangular in plan, with the major dimension running east-west. It is located at the southern end of what is sometimes referred to as "soapsuds row." Wood double-hung windows were used throughout. The building had large double doors reached by wooden ramps from grade to floor level. The entire building, except the roof, was painted.

See Appendix plate 74 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

This building has had a substantial wing added to its south side. It is not known at this time whether this addition dates to the Army period or not. The materials, windows, and details are similar to the original structure (although the O.H. garage door is definitely of a later period) but this similarity is not necessarily significant. The wing may simply have been constructed to match the original building, or it is possible that this is what became of another early building (possibly the fire engine house or the hook and ladder house). At any rate, with the exception of this wing, which is a major alteration, the original portion of the building retains most of its original appearance, materials, and details. The building has been reroofed, but the horizontal shadow-line application is not an historical detail. The building is in need of some general maintenance repair, and should be painted.

Existing paint colors are not historic.

See Appendix plate 75 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

This building should be retained and restored provided that it has sufficient value for interpretive, historical, and community purposes.

The south wing should be removed from the structure unless it can be proven that it was added during the Army period.

The foundations, siding, roof, etc. should be repaired as required to render the building structurally sound and watertight. The original fenestration should be restored. The building should be repainted to its historic colors. See Appendix page 319 for color schedule.

Recommended Further Study

Addditional consideration will have to be given to the value of the building and a decision made to either restore it or demolish it.

Additional investigation and/or research may be required to determine the date of the addition of the south wing.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Troop Workshops			Paint Shop		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1					
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	25'x 60'		1500 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Workshops Total	2 1 3	This information obtained from Army Buildings Register, item 167, Yellowstone Park Archives			No physical investigation of the interior was made.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes	See item 4			See item 4	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES		See item 4			See item 4	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Wood	
CONSTRUCTION	Frame	
FINISH	Painted rustic siding	
COLOR	White	Cream
REMARKS		
ROOF		ORIGINAL
CONSTRUCTION	Wood Frame	
UNDERLAYMENT		
ROOFING	Wood Shingles	Wood shingles - not original application.
TYPE		
COLOR / FINISH	Natural - unfinished	Natural - unfinished
REMARKS		
TRIM		ORIGINAL
MATERIAL	Wood	
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Numbers: 30, 31, 32, 33

Common Name: Residences

Historic Name: N. C. S. Quarters

Administrative Data

Order of Significance

These buildings are classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. These buildings will receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8112; National Archives: Record Group 393.
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 3, HHA, WSC.

Historical Data

HS 30, Noncommissioned Staff Officers Quarters, Army No.30

One and one-half-story, frame building. Tin

roof. Completed in 1897. Cost, $1,938. This is the southernmost of four such sets of quarters. Today it is the largest of the four, an ell having been added to its north end. The plans for these quarters, prepared about 1891, show a parlor, dining room, kitchen, pantry, and hall on the ground floor, and a bedroom upstairs-- part of the second floor being left unfinished.

These NCO quarters were assigned to the several sergeants on the post staff: sergeant major, quartermaster sergeant, commissary sergeant, signal sergeant, and one or two others. During Fort Yellowstone's time, the Army did not encourage the NCOs assigned to troop duty to marry. It rarely provided either quarters or rations for their families. This policy did not extend to staff NCOs, whose prestige and technical skills set them apart.

The terms Laundress Row and Soapsuds Row has been applied to these four sets of quarters. It is not an apt term. It is incorrect to identify the wives of these staff sergeants with the laundresses who once had been authorized by the Army. It is possible that some of these wives did take in laundry to supplement their husbands' incomes. But it is also a fact that at Fort Yellowstone the troops did their own laundry and/or took their laundry to the Chinese establishment. These wives were the cream of the enlisted society, and a far cry from their sisters of old who did laundry and other things to earn their keep.

Present use: Residence

Sources: "Early Pictures;" NA, RG92, OQMG, Consolidated File, Fort Yellowstone, Box 1269, Lt. Col. T. Wint, IG,Aug. 30, 1899, to CO, Fort Yellowstone; NA, RG393, Fort Yellowstone, Letters Received, 1905-10, Box 3, 2nd Lt. Cunningham, Troop F, 8th Cavalry, June 22, 1908, to Adj., Fort Yellowstone.

HS 31, Noncommissioned Staff Officers Quarters, Army No. 11

One and one-half-story, frame building. Tin roof. Completed in 1891. Cost, $2,040. Similar to HS 30. Second floor was finished off into two bedrooms, two closets, and a hall.

Present use: Residence
Sources: "Early Pictures;" NA, Cartographic Division, plans.

HS 32,Noncommissioned Staff Officers Quarters, Army No. 12

Same as above. Built in 1891. Retained by the U.S. Engineer Officer in 1916, when Fort Yellowstone was turned over to the Department of the Interior.

Present use: Residence
Sources: "Early Pictures"

HS 33,Noncommissioned Staff Officers Quarters, Army No. 31

Same as above. Completed in 1897.

Present use: Residence
Sources: "Early Pictures"

Architectural Data

Description of Historic Appearance and Conditions

This series of four buildings was constructed along the eastern edge of the terrace. The center two (buildings 31 and 32) were the earliest of the four and, when constructed, were situated at some distance from the rest of the main fort structures. See Appendix plates 79 and 81 . Later, when the second two were built and as the fort expanded in a northerly direction, the location of these buildings continued to be somewhat ostracized, being now situated behind and somewhat below the stables. Nevertheless, they were somewhat pleasantly located

among a grove of trees, with a magnificent view of the canyon and mountains to the east.

The buildings are basically alike, with minor variations. They are two-story frame buildings, with gabled roofs. The walls are covered with rusticated wood siding at the first floor, and wood shingles at the gables. The roofs are covered with metal shingles. A covered porch or "piazza" extends across the entire east side of the buildings, and there was originally a smaller covered porch at the rear entrance on the west side. The roofs of these porches were integral with the roof of the main structure. A dormer admitting light to the second floor bedroom is centered on the east side of the roof. A pair of windows with shingled "eyebrows" at their heads were centered at each gable at the second floor. Wood double-hung windows were used throughout. Of particular interest are the three exceptionally large (5-feet wide by 6-feet high, 9-foot head height) windows located at the parlor and dining rooms. These were the only buildings to have such large windows, and whether or not there was specific reason for this is not known. The entire structure, including the roof, was painted.

See Appendix plate 76 for photographs of their historical appearance.

Description of Existing Appearance and Conditions

These buildings generally retain their historical appearance. Among the major alterations are the addition of a wing on the north side on building 30, a dormer on the west side of building 32, enclosed rear porches at all four buildings, and various lean-to additions on the west side of several structures.

The buildings are all in basically good condition. but are in need of some maintenance repair. The wood piers supporting the front porches of buildings 31 and 32 are deteriorating and should be replaced. (Buildings 30 and 33 have stone piers.) There are some missing and deteriorating shingles at the

gables of the buildings, and the buildings are badly in need of paint. The colors are no longer historic.

See Appendix plates 78-84 for photographs of their existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

These buildings should definitely be preserved as historic structures. All necessary repair and maintenance should be done, and the buildings rendered structurally sound and watertight. Particular attention should be paid to the foundations and roofing. Subfloor areas should be investigated to be sure that there is adequate ventilation and no earth-wood contacts. The roofing should be repaired and/or replaced as necessary. The lean-tos and rear porch enclosures should be removed if possible, and removable porch enclosures provided for the winter months if necessary. It is not recommended that the added wing at building 30 or the dormer at building 32 be removed at this time. The buildings should be repainted to their historic colors. See Appendix page 324 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	N. C. S. Quarters			Residences		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	No	No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	24'x30'		720 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Parlor Dining Room Kitchen Pantry Hall Bedroom Bathroom	1 1 1 1 1 1 1	This information obtained from construction drawings only.			No physical investigation of the interior has been made.	
Total	7					
5. UTILITIES		REMARKS			REMARKS	
WATER	Yes	See item 4.			See item 4.	
SEWER	Yes					
ELECTRICITY	Yes					
GAS / OIL	No	Coal/wood				
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS	1	See item 4.			See item 4.	
LAVATORIES	1					
TUBS	1					
SHOWERS						
SINKS	1					
WATER HEATER	1					
FURNACE / STOVES	2					

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	Rubble masonry	
FINISH	Natural	
COLOR	Natural	
REMARKS		
WALLS		
MATERIAL	Wood	ORIGINAL
CONSTRUCTION	Frame	
FINISH	Painted..rustic siding	
COLOR	White	
REMARKS		Cream
ROOF		
CONSTRUCTION	Wood frame	ORIGINAL
UNDERLAYMENT		
ROOFING	Metal Shingles	
TYPE	Diamond pattern	
COLOR / FINISH	Painted - red	Painted - green
REMARKS		
TRIM		
MATERIAL	Wood	ORIGINAL
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 34

Common Name: Supply Warehouse

Historic Name: Cavalry Stables

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8115
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 4, HHA,WSC

Historical Data

HS 34, Cavalry Stable, Army No. 48

Stone walls, one and one-half-story, concrete floor. Completed 1909. Capacity: 94 horses (88 open

stalls, 6 box stalls, 5 rooms). Granary and hay loft on second floor. In 1910, the storage capacity was increased to 15,000 cubic feet. (19 by 120 feet). This structure was retained by the U.S. Engineer Officer when Fort Yellowstone was turned over to the Department of the Interior.

Present use: Storehouse
Sources: "Early Pictures"

Architectural Data

Description of Historic Appearance and Conditions

This building is a two-story masonry structure, originally housing stables on the main floor and hay and grain storage in the loft. The walls were constructed of local sandstone. It has a gabled roof over the clerestory at the loft, and shed roofs over the wings on either side, all covered with red clay tile. It has a rectangular plan with its major dimension in a north-south direction, and is generally symmetrical about both its major and minor axes. A series of ventilator-light combinations extend along both sides of the clerestory, with the frame walls between covered on the exterior with wood shingles. Two large doors at either end of the building constitute the major entrances to the building, with smaller doors at approximately the middle of the east and west sides. There is also a loft door and hoist at the south end. Wood double-hung windows were used at the south end of the building in the tack and store rooms, and smaller windows with sliding sash were used elsewhere. Dressed stone lintels and sills were used at all windows in masonry walls, steel lintels were used over the large doors. All sash, eaves, trim, metal lintels etc. were painted throughout.

See Appendix,plate 85 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

The historic appearance of this building is generally intact with regard to the overall structure, but there have been some rather extensive alterations of the east side with the addition of a large covered loading dock and a lean-to addition of concrete block. This side of the structure is not, however, readily visible to the public. The doorways have generally been altered or enclosed, but otherwise the fenestration remains basically the same. The original clay tile roofing has been removed, and the structure re-roofed with clay tile. The basic pattern of this clay tile matches the original, but the ridge and end tile vary somewhat. The difference is not visible to the casual observer. The paint colors are no longer historic.

Physically, the condition of the building appears to be excellent.

See Appendix, plate 86, for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Any cracks in the masonry walls should be sealed and repointed, and consideration given to treating all sandstone surfaces with a water-repellant coating to reduce spalling, cracking and staining. This is the one structure whose tile roof will probably not require complete replacement, but the ridge and end tile should be replaced with historically accurate tile in conjunction with the re-roofing of other structures.

All painted surfaces should be repainted to their historic colors. See Appendix, page 316 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Cavalry Stables			Supply Warehouse		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Hay and feed loft	No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	176'x 32'		5632 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Stable Store Rooms Saddle Rooms Dispensary Granary	1 2 2 1 1	88 open stalls 6 box stalls			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
Total	7					
5. UTILITIES		REMARKS			REMARKS	
WATER	Yes				See item 4.	
SEWER	Yes					
ELECTRICITY	Yes					
GAS / OIL	No	Not heated				
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS					See item 4.	
LAVATORIES						
TUBS						
SHOWERS						
SINKS						
WATER HEATER						
FURNACE / STOVES						

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Concrete	
CONSTRUCTION	PIP	
FINISH	Cement Plaster	
COLOR	Natural (gray)	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Sandstone	
CONSTRUCTION	18 & 20-inch ashlar masonry	
FINISH	Pitch face-smooth lintels, sills, water-tables, etc.	
COLOR	Color-Natural (gray)	
REMARKS		
ROOF		ORIGINAL STRUCTURE
CONSTRUCTION	Wood frame	
UNDERLAYMENT	Felt	
ROOFING	Clay tile	Original clay tile roofing removed-replaced with sim., except at ridge and ends.
TYPE	French	
COLOR / FINISH	Red (unglazed)	
REMARKS		
TRIM		ORIGINAL
MATERIAL	Wood (Misc. metal)	
FINISH	Paint	
COLOR	White	Cream
REMARKS		
CLERESTORY		ORIGINAL
Material	Wood	
Construction	Frame	
Finish	Wood shingles-painted	
Color	Red shingles, white trim	Brown shingles, cream trim.

Building Number: 35

Common Name: Canteen

Historic Name: Post Exchange

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8117
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 4, HHA, WSC.

Historical Data

HS 35, Post Exchange and Gymnasium, Army No. 35

One-story, frame and brick building. Tile roof. Completed in 1905. Cost, $20,950. Contractor, Noe

and Miller. Described by Army as "Colonial" architecture. Army changed roof to shingles in 1913.

This structure replaced an earlier post exchange about which little is known. In 1900, Mrs. Jennie H. Ash, who had a post office and store at Mammoth, complained that the early post exchange was competing with her in selling articles to park visitors. This early PX was staffed by a corporal, who received $15 per month extra, a barber ($40), and a bookkeeper ($15). It was divided into two sections: store and canteen. Enlisted men had monthly credit: privates -- $4, corporals -- $6, and sergeants -- $7.

In 1904, Jacob Willig won a contract of $1,200 to supply gymnastic apparatus for the new building. In 1905, Major Pitcher gave some idea of the interior of the gym when he wrote:

> The interior brick wall is strong enough but it is rough and unsightly. This can be remedied by covering it with any material not liable to be easily marred or broken. The lock joint metallic lining was suggested, for the reason that it could be put up in such a way, as to rest directly against the brick wall....The gymnastic aparatus[sic] supplied for use...is permanently attached to the wall on all sides of the room, and projects into the room much further than any of the radiators to 2"x 4" strips extending from the floor to the wall plate of the wainscot, will make no appreciable difference in floor space of the gymnasium.

In 1906, it was reported that there was a reading room in the building, but no library. An inspector general, in 1908, said that neither the restaurant nor the barber shop was clean.

Present use: Community services and gymnasium.

Sources: "Early Pictures;" NA, RG 92, OQMG, Consolidated File, Fort Yellowstone, Box 1269, Contracts; RG 393, Fort Yellowstone, Letters Sent, 1903-06, Pitcher, Aug. 8, 1906, to Ch. Quartermaster,

Department of Dakota; and Pitcher, Mar. 14, 1905, to QMG; RG 393, Fort Yellowstone, Letters Received, 1905-10, Lt. Colonel Wilder, IG, report, Nov. 10-14, 1906; and Maj. S.W. Miller, IG, report, July 31, 1908; Yellowstone Archives, 16, Secretary of the Interior Letters, Actg. Secretary Thomas Ryan, Feb. 17, 1900, to Actg. Supt., Yellowstone,

Architectural Data

Description of Historic Appearance and Conditions

This building is a one and one-half story frame structure originally housing the post exchange and gymnasium. It consists of a main wing with its major dimension running north and south and having a main floor and a daylight basement floor, and a gymnasium wing with its long dimension running east and west. This wing is to the east and centered on the main wing. The structure is generally symmetrical about an east-west axis. The walls are brick above grade to plate height at the daylight basement, and wood frame with rusticated wood siding above. It has a hipped roof, which apparently was originally covered with slate shingles, but replaced with wood shingles by the Army. The most prominent feature of the structure is a colonnaded entrance portico centered on the east elevation. The pediment of this portico was covered with wood shingles, with a circular window centered on it. The main entrance door is also distinguished by a large arched transom. Wood double-hung windows were used throughout. The structure was painted, except for the roof and brickwork, which were left natural.

See Appendix, plate 87 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

The historic appearance of this structure is basically intact, with no major exterior alterations having been made. Minor variations include a roof over the raised porch on the north side, a

projecting flagpole over the circular window at the portico pediment, and chimney caps which are no longer to their original configuration.

The building is in need of some general maintenance repair. The foundations appear to be in good condition, but there has been some spalling of the stone watertables. The concrete steps and stoop at the northeast door has pulled away and begun to sink. The brick portion of the walls is generally in good condition, although in need of some repointing. The brick has also been painted. The exterior siding and trim is also in need of some repair. The siding is broken and pulling loose in some areas, and the portico columns are especially in need of attention. The horizontal shadow-line application of the wood shingles is not an original application detail. The building is in need of paint throughout, and the colors are not historic.

See Appendix, plate 88 for a photograph of the existing appearance of this building.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Consideration should be given to treating the stone watertables with colorless water repellant to reduce spalling. The brick portions of the walls should be cleaned of all paint and restored to their natural appearance, and should be repaired and repointed as necessary. The exterior siding and trim should be repaired or replaced as necessary, and the portico columns repaired. The flagpole at the pediment should be removed. The chimneys should be repaired as necessary, and rebuilt to original configurations. The roof should be repaired if necessary, and the horizontal shadow-line effect removed.

All painted surfaces should be repainted to their historic colors. See Appendix, page 321 for color schedule.

Recommended Further Study

Some original interior details and construction still remain. Consideration should be given to the possibility of preserving them, as this is one of the few structures being used for generally the same purpose for which it was constructed, and whose usage is not private or generally restricted.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Post Exchange			Community use		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2	Yes	Daylight			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing Gymnasium Wing Total	34'x 54' 35'x 90'		1836 SF 3150 4986 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Gymnasium Toilets Store Rooms Pantry Kitchen Lunch Room Reading Rooms Office Halls Billiard Room Boiler Room	1 2 3 1 1 1 2 1 3 1 1	This information obtained from construction drawings only. Total rooms= 17			No physical investigation of the interior was made as this structure is currently scheduled for exterior retoration only. See recommendations for further study.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	Coal			See item 4	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES URINALS	3 4 0 1 1 1 1 2	See item 4			See item 4	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Stone	
CONSTRUCTION	18" Masonry	
FINISH	Cement Plaster	
COLOR	Natural (gray)	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Brick, wood	
CONSTRUCTION	Masonry, frame	
FINISH	Natural rustic siding - paint	Brick surfaces painted
COLOR	Red brick, white wood siding	
REMARKS	Wood shingles at pediment	
ROOF		ORIGINAL STRUCTURE
CONSTRUCTION	Wood frame	
UNDERLAYMENT		
ROOFING TYPE	Wood shingles	Not original application
COLOR / FINISH	Natural	Natural
REMARKS	First roofing apparently slate shingles.	
TRIM		
MATERIAL	Wood	ORIGINAL
FINISH	Paint	
COLOR	Red	Cream
REMARKS		

Building Number: 36

Common Name: Administration Building

Historic Name: Double Cavalry Barrackes

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8120
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol.4, HHA, WSC.

Historical Data

HS 36, Double Cavalry Barracks, Army No. 50

Three-story, stone building. Tile roof. Completed in 1909. Cost, $95,469. Capacity: two troops

or 200 men. This was the largest structure at Fort Yellowstone.

Each half of the building contained:
Basement: boiler, coal bin
1st floor: kitchen, mess, 7 rooms, hall
2nd floor: 2 rooms,a dormitory, a lavatory, and a passageway
3rd floor: 3 rooms, a dormitory, a dayroom, 2 halls, and a passageway
Attic: unfinished

GI furniture included 2 refrigerators and 163 wall lockers, as well as the customary bunks, foot lockers, rifle racks, etc.

On July 18, 1911, a fire destroyed a small portion of the building. The cost of the repairs amounted to $2,950. Gagnon & Co., Billings, got the contract for repairs. At the time of the fire, Troops F and G, 1st Cavalry, occupied the barracks. The Livingston Enterprise reported, with exaggeration, that the fire was thought to have started through spontaneous combustion and that the "entire building was gutted." While fighting the fire, a soldier fell all three stories down to the basement and was badly injured. Charred rafters and sheathing in the north wing still remain.

The south half of this structure was retained by the U.S. Engineer Officer when the fort was turned over to the Department of the Interior in 1916.

Present use: Park headquarters

Sources: "Early Pictures;" NA, RG 92, OQMG, Consolidated File, Fort Yellowstone, Box 1270, 2nd Lt. R. Lounsbury, July 10, 1912, to Chief QM, Western Division, San Francisco; Aubrey L. Haines, quoting from The Livingston Enterprise, July 18, 1911.

Architectural Data

Description of Historic Appearance and Conditions

This building is a three-story masonry structure, with walls of local sandstone, and a hipped roof covered with red clay tile. It has a U-shaped plan, with the central wing running north and south, and transverse east-west wings at either end. It is generally symmetrical about an east-west axis. The building was originally divided along this axis from basement to attic, each company occupying one end of the structure. It has a covered porch at all three floors along the west elevation of the central wing, and along all three walls facing the court on the east. Wood double-hung windows were generally used throughout, with dressed stone lintels and sills. A band of dressed stone also extends around the entire building just above the first floor windows. Eaves, cornices, porch ceilings, posts, second and third floors, all sashes, and doors are of wood and are painted.

See Appendix, plate 89 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions.

The historic appearance of this building is generally intact on the exterior. The interior, however, has recently been extensively remodeled.

Physically, the building still is in need of considerable work. There is extensive cracking through the foundations to the roof. The cause of these cracks has not been determined, but they are believed to be at least partially the result of earthquake damage. The building appears to be sound, however, and there has been no visible settling.

The roof is in poor condition. The roof framing at the north wing has been severely damaged at some time in the past by fire, and although repairs have been made, these were somewhat of a makeshift nature. Additionally, there has been and continues

to be considerable water penetration. The roof tiles are suffering from various degrees of damage and deterioration. This is primarily due to 50 years of exposure to the climatic conditions of the area. The roofing felt has almost entirely disintegrated. The valley flashing, while in good condition, is inadequate for proper moisture protection. This is the only building at Fort Yellowstone whose roof has been extensively examined. With the exception of the fire damage, there is no reason to suppose that conditions of the other tile roofs will be any better, with the exception of building 34.

The sash and trim appear to be in good condition, but badly in need of paint. Paint is also peeling badly in other areas, particularly at the porch ceilings, some of which is probably due to water penetration of the roof. The colors of the painted surfaces are no longer historic.

See Appendix, plate 90 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

The foundation and wall cracks should be repaired and sealed, and the masonry repointed as necessary. All masonry surfaces should be treated with a colorless water-repellant coating to reduce cracking, spalling, and staining. That portion of the roof structure damaged by fire should be replaced, the felt underlayment should be replaced entirely, dificient flashing should be replaced, the clay tile should be replaced as necessary, and the attic floor should be insulated to help alleviate deteriorating weather action on the tile. A detailed report has already been made regarding the conditions and recommended treatment of the roof of this structure, and because conditions may be presumed to be similar at other structures with similar roofs, is included

in this report in the appendix.

All painted sufaces should be repainted to their historic colors. See Appendix, page 316 for color schedule.

Recommended Further Study

The cracking of the stone walls appears to be more severe in this structure than at any of the other stone buildings. Aubrey Haines indicates that during the construction of this building, a wagonload of materials broke through the crust of the earth to expose a large cavern at the northeast corner of the building.[1] Apparently, this hole was filled and the footings strengthened and enlarged. However, one of the most severe cracks occurs on the north elevation in this general area, and while, as mentioned above, there does not appear to be any visible settling of the structure, additional investigations may be warranted.

1. Aubrey L. Haines, "The Yellowstone Story," Ch. 16.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Cavalry Barracks			NPS Administrative Office		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	3	Yes	Yes	3	Yes	Yes
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing North Wing South Wing Total	41'x 82' 41'x 86' 41'x 86'		3362 SF 3526 3526 10414 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Kitchens Day Rooms Mess Rooms Hallways Boiler Rooms Offices Store Rooms Cooks Rooms N.C.O. Rooms Dormitories Toilets Misc.	2 2 2 10 2 4 6 2 12 4 4 4	This information obtained from construction drawings only. Total rooms= 54			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	See item 4. Coal			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / ~~STOVES~~ URINALS LAUNDRY TUBS	20 32 2 8 6 2 8 8	See itme 4.			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Concrete	
CONSTRUCTION	20" PIP	
FINISH	Natural	
COLOR	Gray	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Sandstone (local)	
CONSTRUCTION	Ashlar masonry	
FINISH	Pitch face - smooth lintels, sills water-tables, etc.	
COLOR		
REMARKS	Color - Natural (gray)	
ROOF		
CONSTRUCTION	Wood frame	ORIGINAL
UNDERLAYMENT	Felt	
ROOFING	Clay tile	
TYPE	French	
COLOR / FINISH	Red (unglazed)	
REMARKS		Roof in poor condition
TRIM		
MATERIAL	Wood	ORIGINAL
FINISH	Paint	
COLOR	White	Cream
REMARKS		
DORMERS		
Material	Wood	ORIGINAL
Construction	Frame	
Finish	Wood shingles, trim	
Color	Red shingles, white trim	Brown shingles, cream trim

Building Number: 37

Common Name: Blacksmith Shop

Historic Name: Blacksmith Shop

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP:B-517
Drawings: NPS: 101/8121 (Not original drawings)
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol.4, HHA,WSC.

Historical Data

HS 37, Shops and Guards, Army No. 51

One-story, stone building. Tile roof. Wood and brick floors. Completed in 1909. Cost, $7,632.

Designed to serve two cavalry stables. Interior arrangement: 2 blacksmith shops, 2 saddle shops, and 2 stable guard rooms.

Present use: Blacksmith shop and quarters
Sources: "Early Pictures"

Architectural Data

Description of Historic Appearance and Conditions

This building is a single-story masonry structure with walls of local sandstone and a gabled roof covered with red clay tile. It has a rectangular plan with its major dimension running in an east-west direction. Large openings with a pair of doors were located on the north and south walls to allow wagon and horse access. Wood double-hung windows were generally used throughout, with lintels and sills of dressed stone. Eaves, sash, and other trim are of wood and are painted.

See Appendix, plate 91 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

The historic appearance of this structure is intact. The only noticeable change is the substitution of an overhead garage door for the original sliding doors on the south side.

The building is in good physical condition. There has been some cracking of the masonry walls, particularly in the areas of the large door lintels. There is a good possibility that the roofing will need considerable repair. The doors and window sash appear to be in good condition.

The painted surfaces are no longer historic as to their colors.

See Appendix, plate 92 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigation

None.

Recommended Treatment

All cracks in the masonry walls should be sealed and repointed, and structural repairs made as may be necessary. Consideration should be given to treating all sandstone surfaces with a water-repellant coating to reduce spalling, cracking, and staining. Any necessary carpentry and repair should be undertaken. The overhead garage door should eventually be replaced with doors to match the original, if feasible. Partial, if not complete, replacement of roof tile and underlayment will probably be required.

All painted surfaces should be repainted to their historic colors. See Appendix, page 316 for a color schedule.

Recommended Further Study

The roof should be investigated to determine the nature and extent of any necessary repairs.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Blacksmith Shop & Guard Quarters			Shops & Quarters		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1		No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	40'x 60'		2400 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Blacksmith Shops Saddle Shops Stable Guards Total	2 2 2 6	This information obtained from item 167, park archives.			No physical investigation of the interior was made as this structure is scheduled for exterior restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER	No	See item 4.			See item 4.	
SEWER	No					
ELECTRICITY	Yes					
GAS / OIL	No	Quarters heated by stoves				
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS						
LAVATORIES						
TUBS						
SHOWERS						
SINKS						
WATER HEATER						
FURNACE / STOVES						

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Concrete	
CONSTRUCTION	PIP	
FINISH	Cement Plaster	
COLOR	Natural (gray)	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Sandstone (local)	
CONSTRUCTION	Ashlar Masonry	
FINISH	Pitch face-smooth lintels, sills and water-table.	
COLOR		
REMARKS	Color-Natural - gray	
ROOF		ORIGINAL
CONSTRUCTION	Wood frame	
UNDERLAYMENT	Felt	
ROOFING	Clay Tile	
TYPE	French	
COLOR / FINISH	Unglazed Red	
REMARKS		High probability of deteriorating roofing and underlayment
TRIM		ORIGINAL
MATERIAL	Wood	
FINISH	Paint	
COLOR	White	Cream
REMARKS		

Building Number: 38

Common Name: Fire House

Historic Name: Cavalry Stables

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8115
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 4, HHA, WSC.

Historical Data

HS 38, Cavalry Stable, Army No. 49

One and one-half-story, stone walls, concrete floor. Completed in 1909. Cost, $28,962. Capacity:

94 horses (88 open stalls and 6 box stalls). In 1910, the storage capacity of the loft was enlarged to 15,000 cubic feet (19 by 120 feet). A hay loft and a granary were on this floor.

Present use: Firehouse
Sources: "Early Pictures"

Architectural Data

Description of Historical Appearance and Conditions

Built from the same plans, this building was virtually identical in appearance and construction to building 34. Located immediately to the north of building 34, its only difference is that it is oriented in an east-west direction rather than a north-south direction.

See Appendix, plate 93 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

This historic appearance of this structure is basically intact. There have been no major additions to the structure. Some of the doorways have been enlarged, altered, or enclosed, but otherwise the fenestration remains the same. The most obvious deviation from its original appearance is the fact that the tile roof has been removed and replaced with wood shingles. The paint colors are no longer historic.

Structurally, the condition of the building appears to be good, with only some minor cracks in the stone walls.

See Appendix, plate 94 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigation

None.

Recommended Treatment

All cracks in the masonry walls should be sealed and repointed, and consideration given to treating all sandstone surfaces with a water-repellant coating to reduce spalling, cracking, and staining. The wood shingles should be removed from the roof, and the building reroofed with clay tile to match the original.

All painted surfaces should be repainted to their historic colors. See Appendix, page 316 for color schedule.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Cavalry Stables			Fire House & Communications Center		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	Hay and feed loft	No			
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Overall	176'x 32'		5632 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Stable Store Rooms Saddle Rooms Dispensary Granary Total	1 2 2 1 1 7	88 open stalls 6 box stalls			No physical investigation of the interior was made as this structure is scheduled for restoration only.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes No	Not heated			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES					See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS MATERIAL CONSTRUCTION FINISH COLOR REMARKS	 Concrete PIP Cement Plaster Natural (gray)	ORIGINAL
WALLS MATERIAL CONSTRUCTION FINISH COLOR REMARKS	 Sandstone (local) 18 & 20-inch ashler masonry Pitch face-smooth lintels, sills, watertables, etc. Color-Natural-gray	ORIGINAL
ROOF CONSTRUCTION UNDERLAYMENT ROOFING TYPE COLOR / FINISH REMARKS	 Wood frame Felt Clay tile French Red (unglazed)	ORIGINAL STRUCTURE Original clay tile roofing removed - replaced with sim.except at ridge and ends.
TRIM MATERIAL FINISH COLOR REMARKS	 Wood (misc. metal) Paint White	ORIGINAL Cream
CLERESTORY Material Construction Finish Color	 Wood Frame Wood Shingles - painted Red Shingles - white trim	ORIGINAL Brown Shingles, cream trim

Building Number: 39

Common Name: North District Ranger Station

Historic Name: U. S. Engineer Office

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive both exterior and interior restoration as a part of the historic scene. It is hereby recommended that this building be ultimately used to house the Yellowstone National Park archives and library, and that the interior restoration be adapted to this use.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4b
PCP: B-518
Drawings: NPS: 101/8144
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 4, HHA, WSC.

Historical Data

HS 39, U.S. Engineer's Office, No Army number

Two-story, stone building, with basement. Tile roof. Constructed when Hiram M. Chittenden was the

Engineer Officer. Architecture is unique in Yellowstone. Affectionately called "the Pagoda."

In 1902, Chittenden requested authority to employ an architect to design this structure. He proposed having his offices on the ground floor, and quarters for his office staff on the second floor. The ground floor would have a dark room; the second, a bathroom. He estimated the cost at $10,000.

Chittenden wanted to hire the architectural firm of Reed and Stem, St. Paul, Minn., at a price of $750. At first, the Chief of Engineers said that this was too much money: "With the exception of designing the exterior, all the work of designing can be done by Captain Chittenden." He did agree that Chittenden could pay an architect a maximum of $250. The captain persevered and finally got the authority to expend the $750. Reed and Stem had designed the new Northern Pacific Railroad station at Livingston, Mont., which Chittenden thought was "a very fine structure." Also, they anticipated designing the station at Gardiner.

Chittenden submitted plans and specifications for the building in October 1902, with the following comments:

> (1) The general floor plans of the office were worked out by myself and furnished to the architects as the basis of their designs.
>
> (2) the counter provided in the rear of the clerk's room is for the registration of laborers, etc., the signing of rolls....
>
> (3) It is intended to use the drafting room as a sort of cabinet room also, in which will be exhibited photographs of all the works, specimens of the flora and minerals of the Park, and a large map showing in detail the road system.

(4) Hot water heating is proposed.

(5) The building will be wired for electric lights, call bells, and telephone.

(6) It is proposed to cut the words "United States Engineer Office" in the capstone over the porch, and to work an engineer castle into the face of the wall immediately over the porch in the space occupied by the small windows in the front elevation of the present plan [today this is a window]. Some characteristic colored stone of the park will be used for this purpose. These two details have not yet been submitted to the architect.

The only other changes contemplated were to enlarge the basement and to enlarge the building by two feet in width and about 18 inches in height, "if the cost...will permit." His reason was that "the rooms are rather small as they are."

To keep the costs down to $10,000, Chittenden had several ideas: to quarry the rock in connection with rock crushing operations for the roads, to saw the lumber on the government saw mill, to have the plumbing installed by the post plumber of Fort Yellowstone, to have some of the electrical work done by the post quartermaster's electrical engineer.

The specifications for the building are of interest in that they provide some trade names for materials that went into the structure. The roof was to the covered with "Ludowici T-12 Green Glazed Spanish tile." The red and white paints to be used (important colors at Fort Yellowstone) were "National Lead Co.'s Red Seal brand of red lead and Atlantic Brand of white lead or their equals."

Chittenden apparently ran into a problem in quarrying stone for the building. In February 1903 he forwarded to Washington copies of an "emergency contract" for stone that he had entered

into with the Montana Sandstone Co., Butte. From then on the work proceeded rapidly. In April, he reported that the building was "nearly inclosed and some progress has been made on the wiring, plumbing and interior work."

On July 1, 1903, Chittenden wrote up a request for furniture for the new office. He told the Chief Engineer that he would like to have top quality furnishings because the building itself was such a fine one:

1 flatop desk with drawers, not to exceed	$50.
1 table with cloth top	25.
6 office chairs	40.
2 sets of bookcases	40.
36 window shades	36.
2 rugs	150.
	$341.

The Chief Engineer lowered the ceiling on the office chairs to $18 and denied the purchase of rugs; otherwise he approved the captain's request.

The National Park Service later converted the Engineer Office to park headquarters. But when the number of visitors leaped upward and the permanent staff grew, the headquarters was moved to larger quarters. At present the district ranger for the northern part of the park maintains his office in this structure. Many internal changes have taken place in the building, but Chittenden's influence may still be seen: a handsome fireplace, rich woods in the trim, and even the frames for the pictures in the drafting room.

Present use: District Ranger Office.

Sources: Yellowstone Archives, Letters Sent, 10, 1900-01, Chittenden, Sept. 15, 1900, to Captain Goode. NA, RG77, Letters Received, No. 30129/220, Chittenden, April 7, 1902, to Brig. Gen. G.L. Gillespie, with indorsements; No. 30129/244, Chittenden, June 6, 1902, to Gillespie, with indorsements; No. 30129/264, Chittenden, Oct. 10, 1902, to Gillespie, with indorsements; No. 46204, Chittenden, Feb. 23, 1903, to Gillespie, with indorsements; and No. 30249, Chittenden, July 1, 1903, to Gillespie.

Architectural Data

Description of Historic Appearance and Conditions

This building is a two story masonry structure, with sandstone walls and a hipped roof covered with green glazed clay tile. It is almost square in plan, and is symmetrical about a north-south axis. There is a large covered entrance porch projecting from and centered on the south or main elevation, with steps rising to a floor height of about three feet on all three sides. Chiseled into the lintel or capstone are the words "U. S. Engineer Office." An engineer's castle emblem also was originally set into the space occupied by a window in the south wall directly above the porch roof. Large fireplace chimneys rise along the exterior of the east and west walls.

The building originally contained 16 rooms including the basement furnace room, plus several closets, etc. The first floor, which contained the offices, consisted of a large clerks' room, an office, a drafting room, a darkroom, two vestibules, and a hallway. The second floor was given over to quarters, and contained five bedrooms with closets, two bathrooms,and a hallway.

While constructed of similar materials, this building bears little other resemblance to the rest of the stone structures at Mammoth. It is much more finely detailed than any of the structures designed by the Army. Perhaps the most distinctive feature is the battered walls, which taper from a thickness of two feet at the watertable to one foot at the roof plate. This feature, coupled with the large overhangs of the roof eaves, has resulted in this structure being nicknamed "The Pagoda." Also distinctive is the extensive use of dressed stone at the quoins at the corners of the building and at the window jambs, in the window and door heads and sills, in the porch columns, in the water-table, in the chimney caps, etc. The interior details were equally well executed, with rich, darkly

stained oak doors, window sash, casings, balusters, etc. setting off the plaster wall finish. Among the particularly handsome features of the building were at least one tiled fireplace and several ornate light fixtures.

Doors, window sash, soffits, miscellaneous wood trim, gutter leaders, etc. were painted. The historic colors for these items have not yet been determined, but they were probably not too unlike the rest of the structures at Mammoth.

See Appendix, plate 95 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

The exterior of this structure is intact as to historic appearance, the only noticeable alteration being the removal of the engineer's castle emblem from the south wall over the porch, and its replacement with a glazed window.

The interior, however, has been extensively altered. The only rooms which remain relatively intact are the office and the drafting room. Much of the original oak woodwork has been removed or painted over. The upper floor has been remodeled for office use, with the resultant removal of several walls, closets, doors, etc. The walls and ceilings of several rooms have been covered with unattractive and poorly applied acoustic tile, and the floors in some areas have been covered with linoleoum. The darkroom on the first floor has been converted to a restroom. The original drawings for this building show fireplaces in the clerks' room and the drafting room, but these are not in evidence. It is not known at this time whether they existed but were removed, or whether they were simply never constructed. Handsome globe light fixtures still remain in the first floor hall, and are probably the original fixtures. The light fixtures in all other rooms have been replaced with fluorescent fixtures. It is probable that the missing doors, fixtures, etc.

were never preserved. There are several severe cracks in the masonry walls, from and including the foundations through to the roof plates. Some repointing has been done in several of these areas. Several of the dressed stone quoins and transom sills have been cracked, some of the stone at the front porch columns is spalling badly, and there is excessive deterioration of the east chimney cap. The exterior woodwork at the eaves and porch is badly in need of paint. It is peeling badly, which is possibly indicative of moisture penetration. While the roof tile appears to be in generally good condition, it is probable that the condition of the underlayment is similar to that of the other tile roofs, and will need to be replaced.

See Appendix, plates 96, 97, and 98 for photographs of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None. However, it is probable that some evidence of original conditions may be uncovered during the restoration process, when it will become practical to remove such items as the acoustic tile, etc. which have been applied over the original surfaces.

Recommended Treatment

All cracks in the foundations and masonry walls should be repaired, sealed, and repointed as necessary. This building seems to have suffered more cracking of the individual stones rather than the cracks simply following the mortar joints. This is due to the more extensive use of quoins and other larger keyed stones. Several severe cracks occur in the smooth dressed stone, and may require such treatment as replacement or repair with reconstituted stone. All masonry surfaces should be treated with a colorless water-repellant coating to reduce cracking, spalling, and staining. Complete replacement of the roofing underlayment and some replacement of tile will probably be required. Exterior trim and sash should be repainted and restored to their historic colors or finish upon determination of such. The

interior should be restored to its original appearance as nearly as is compatible with its proposed usage. Some structural work may be required to enable the building to support the loads imposed by such usage, and consideration should be given to enlarging the basement to enable the installation of fireproof vaults to house the more valuable documents contained in the Park Archives. Until such usage and consequent interior restoration becomes feasible, the removal or alteration of any and all historic interior features, conditions, or materials should be prohibited.

Recommended Further Study

The roof should be investigated to determine the nature and extent of any necessary repairs.

Additional study will be required before a final decision is made regarding the appropriateness and feasibility of utilizing this structure to house the Park library and archives.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	U.S. Engineer Office			NPS Ranger Station		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	2		Partial	2		Partial
3. SIZE	DIMENSIONS		AREA	DIMENSIONS		AREA
Basement	19'x 24'		456 SF			
1st Floor	32'x 36'		1152			
2nd Floor	32'x 36'		1152			
Total			2760 SF			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Clerks Room	1			1		
Drafting Room	1					
Office	1			7	Bedrooms, drafting room converted to office use	
Darkroom	1					
Vestibules	2			2		
Halls	2			2		
Bedrooms	5				Small bath use	
Bathrooms(Toilet)	2			2	unknown	
Furnace Room	1			1	Darkroom used as toilet	
	16					
Storeroom				1		
5. UTILITIES		REMARKS			REMARKS	
WATER	Yes			Yes		
SEWER	Yes			Yes		
ELECTRICITY	Yes			Yes		
GAS / OIL	No	Coal		Yes		
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS	2					
LAVATORIES	2					
TUBS	2					
SHOWERS	0					
SINKS	1					
WATER HEATER						
FURNACE / STOVES	1					

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Concrete	
CONSTRUCTION	26" PIP	
FINISH	Form	
COLOR	Natural (gray)	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Sandstone(source uncertain)	
CONSTRUCTION	Ashlar Masonry,quoined	
FINISH	Pitch face--smooth lintels,sills,quoins,etc.	
COLOR	Natural-gray	
REMARKS	Specifications call for Colombus,Mont.sandstone	
ROOF		ORIGINAL
CONSTRUCTION	Wood frame	
UNDERLAYMENT	Felt	
ROOFING	Clay tile	
TYPE	Spanish	
COLOR / FINISH	Green,Glazed	
REMARKS		
TRIM		ORIGINAL
MATERIAL	Wood	
FINISH	Paint	
COLOR	Undetermined	Cream, black
REMARKS		

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
8. INTERIOR CONST.		
FLOORS		ORIGINAL
MATERIAL	Southern White Pine, Concrete at Basement	
CONSTRUCTION	Wood framing, PIP conc.	
FINISH	Oiled	
COLOR	Clear	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Plaster	
CONSTRUCTION	2-coat, sand finish, pine lath	
FINISH	5-coat Rinald Bros. enamel	
COLOR	Color-unknown	Various
REMARKS		Acoustic tile in various locations
CEILINGS		ORIGINAL
MATERIAL	Same as for Walls	Same as for Walls
CONSTRUCTION		
FINISH		
COLOR		
REMARKS		
TRIM / CASEWORK		ORIGINAL
MATERIAL	Wood-oak, pine	
FINISH	Varnish	
COLOR	Stained	
REMARKS		Much of the original trim removed or painted over.

Building Number: 40

Common Name: Duplex Residence

Historic Name: U. S. Engineer Building (Chittenden Residence?)

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historical scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: None
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 4, HHA, WSC.

Historical Data

HS 40, Residence, U. S. Engineer Office, No Army Number

Two-story, frame building. Completed ca. 1903. Located behind U. S. Engineer Office. Today, the

structure is all frame, but early photographs indicate that the lower part of the exterior walls was originally faced with stone.

When Chittenden planned his office building, he also planned to erect a house for himself. Not being a member of the regular garrison, he was not entitled to quarters at the fort. (However, when space was available, the post commander did not hesitate to allow Chittenden and his family to occupy them.)

It is tempting to assume that the attractive cottage to the rear of the office building is the residence that Chittenden built in 1903. It may have been. However, the historical evidence that would prove the point has not been found despite an exhaustive search.

At the same time that Chittenden received approval for the office building, he got permission to build the residence for himself: "A wooden structure, of 8 or 10 rooms, heated by hot water, lighted by electricity and provided with the usual conveniences of a comfortable dwelling house. The cost of the building," he said,"will fall within $5,000." The architectural firm of Reed and Stem were to design the exterior of the structure based on Chittenden's own plans-- as part of the $750 contract for designing the office building.

Chittenden then planned to build the residence across the plateau from the office, at the northern base of Capitol Hill. He wrote of the design: "Its long front was suggested by the architects on account of the immediate background, which is a high steep hill, rising from the rear of the house to a height of about 140 feet." His plans for this structure have not yet been found, but the specifications that he forwarded to Washington in 1902 are available. In November, Chittenden wrote that he did not expect to start on the residence until the next spring. Washington offered only one objection to the plans and specifications and informed the captain that he should change the name from "the residence of Captain H. M. Chittenden" to "the residence of the U. S. Engineer officer." This correction may still be seen on page

1 of the specifications.

At this point the written evidence on the residence runs out. It was not built on the south side of the plateau as Chittenden had planned. Whether it is the residence standing at the rear of the office building is open to question. Is the present building Chittenden's residence, or is it one that was built for his senior civil servants?

Before assuming that it was Chittenden's house, one must consider a complaint written by one of his successors, Major E.E. Fries. He complained, ca. 1914, of having to live in the second story of the office building because of lack of space over on officers row at Fort Yellowstone. When the Army left Yellowstone in 1916, it was Fries who succeeded in obtaining a double set of quarters for himself and a military assistant. If the residence was for the U. S. Engineer Officer, the question then must be asked as to why Fries was forced to live upstairs in the office building.

The building is clearly marked on all army maps as belonging to the U. S. Engineer department, but on no map is it specifically identified as to function.

In the Yellowstone Research Library is a photo album, #91787N95, containing pictures taken by Albert L. Noyes, St. Paul, Minn., 1902.

Despite the date, the album has a photograph of the residence on page 11. The caption says that it is the new quarters for the U. S. Engineer. However, one cannot be certain if this means quarters for the officer himself or for employees of his office.

Present Use: Residence.

Sources: NA, RG77, Letters Received, No. 30129/220, Chittenden, April 7, 1902, to Brig.Gen. G.L. Gillespie; No.'s 30129/264, Oct. 10, 1902, and No. 30129/293, Nov. 18, 1902, both from Chittenden to Gillespie; No. 30129/294, "Specifications for Residence of U.S.

Engineer Officer, Mammoth Hot Springs; No. 30129/1627, indorsemant, Ch. of Engrs, W.M. Black, Sept. 5, 1916, to the Sect. of War; No. 30129/1763, Major A.A. Fries, June 9, 1917, to Ch. of Engrs; Yellowstone Archives, Letters Sent, 19, 1908-09, General Young, Aug. 5, 1908, to Capt. J.C. Castner, Construction QM, Fort Yellowstone.

Architectural Data

Description of Historic Appearance and Conditions

This building is a two story frame structure having a roof of combined hipped and gabled construction. It is not certain as to whether this structure was constructed as a duplex or not. It was a somewhat ornate structure, the lower walls being faced with rubble stone to window sill height and rusticated wood siding above, and the second story walls having a combination of paneled siding and scalloped wood shingles. The roof was also covered with wood shingles. A large covered porch extends along the south side of the building. This porch originally had a lower wall of rubble stone and supported the roof with pairs of wood posts, and was decorated with trellises. Although the precise colors originally employed are not yet known, the color scheme handsomely set off the structure by emphasizing its various decorative features.

See Appendix, plate 99 for a photograph of this building at an earlier date. It is not known if this photograph dates to the Army period.

Description of Existing Appearance and Conditions

The basic structure and form of this building still remains, although considerably denuded. The stone is gone from the lower walls and the porch, much of the ornamental structure such as the porch posts have been removed, and the monotone color scheme does little to enhance the appearance of the structure. There have been several fenestration changes, and it appears that there have been at

least one and possibly more additions to the north side of the structure, though this has not been verified. The building appears to be in sound structural condition, however.

For a photograph of its existing condition, see Appendix, plate 100.

Historical Evidence Uncovered by Physical Investigations

None. The Class C investigation given this structure was insufficient to determine historical conditions by physical evidence.

Recommended Treatment

It is recommended that this building be restored to its historic exterior appearance and retained as a part of the historic scene. Structural repairs should be made as may be required.

Building Number: 49

Common Name: U. S. Commissioner's Residence

Historic Name: Same

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic scene.

Proposed Treatment

Adaptive restoration. This building will receive exterior restoration only as a part of the historic scene.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol.4, HHA, WSC.

Historical Data

HS 49, U.S. Commissioner's Residence, No Army Number

An Act of Congress in 1894 authorized a U. S. Commissioner for Yellowstone National Park. Almost

immediately, work began on a combination residence--office--jail. The two-story, stone structure was located at the west end of the plateau, near the mouth of Clematis Gulch, and close to the terraces. It was the first stone building to be erected at Mammoth and is, perhaps, the oldest structure in the area.

The office and the jail cells were located on the first floor. At first the plans called for entering the cell block through the commissioner's office. But, at the suggestion of Captain Anderson, the plans were altered so as to allow for an outside entrance having direct access to the corridor in front of the cells. Despite the excellent construction, the jail was never used. No jailer was ever appointed. Prisoners, civilian as well as military, were housed in the guard house at Fort Yellowstone.

Frisbe J. Shaffer won the contract to build the structure. On December 4, 1894, a board of officers from Fort Yellowstone inspected the completed building and recommended that it be accepted. Copies the plans and specifications for the building are today to be found in the Yellowstone Archives, Letters of the Secretary of the Interior, 6, under "B".

Present use: Residence of the U.S. Commissioner.

Architectural Data

Description of Historic Appearance and Conditions

This building is located at the base of the hot springs, just north of Clematis Creek and the natural formation known as the "Liberty Cap." It is a two-story rectangular structure with walls of local sandstone and a hipped roof covered with wooden shingles. A pair of shed-roofed dormers look out on each side from the second floor, and the roof is crowned by two chimneys at the ridge. A long covered porch runs the length of the front of the

building, which faces the fort to the east. Wood doors and windows were used throughout, and were painted, as were the rest of the trim, fascias, etc.

It is not known just how old the garage structure to the rear of the main building is, but it can be seen in the historic photo, plate 101 of the appendix, as well as on the photo of existing conditions.

Description of Existing Appearance and Conditions

This building appears to be sound and in good condition. Its historic appearance is basically intact, with only minor changes such as the removal of one chimney, a slightly different roofing treatment, and lattice work closing off the subfloor area of the front porch,marking the passage of time.

See Appendix , plate 102 for a photo of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

It is recommended that all necessary repairs be made to this structure and that it be repainted to its historic colors. While there is a case to be made that these structures are in such close proximity to the natural formation of the area that they consitutue intrusions upon them, it is felt that the historic importance of these two buildings negates such arguments and that the commissioner's residence and its ancillary structure be preserved.

Recommended Further Study

Additional investigation is needed to determine the historic colors of this building.

Building Number: 56

Common Name: Power House

Historic Name: Power House

Administrative Data

Order of Significance

This building is classified as being of the second order of significance as part of the historic district.

Proposed Treatment

Continued maintenance of existing materials and appearance. It is suggested that any replacement or repair be done so as to return the building to its historic appearance so long as it continues to be used. No recommendation for its preservation is made at this time due to its remote location.

Operating Provisions

Continued National Park Service maintenance and operation.

Cooperative Agreements

None.

Basic Data

RSP: YELL-H-4a
PCP: B-517
Drawings: NPS: 101/8195
Photographs: Yellowstone Buildings Register; Item 167, Yellowstone Archives; Photo-data book, Fort Yellowstone Vol. 4, HHA, WSC.

Historical Data

HS 56, Second Powerhouse, Army No. 63

Concrete building. Tile roof. Completed in 1911. Cost, $45,889. Basement: boiler room, valve

room, penstock room. First floor: generator room, workshop, toilet, and closet.

This attractive structure, now maintained as a standby electric plant, is not located on the plateau with the other military structures. It stood outside the military reservation, below the plateau and toward the Gardiner River. It is today closely surrounded by NPS residences. It may be approached in an auto only by traveling on narrow, winding, residential streets. Because of safety factors and intrusion on the residences, it does not allow itself to intensive interpretation.

However, on the approach road to Mammoth from Tower Falls, this is the most prominent structure that greets the visitor's eyes. Because of its location, it can be seen even before the structures of the fort proper come into clear view.

Present use: Standby Power Plant
Sources: "Early Pictures"

Architectural Data

Description of Historical Appearance and Conditions

Located below the Hotel Terrace and to the east of the Fort proper, this building is somewhat remote from the rest of the Fort structures. It is rectangular in plan, with concrete walls and a hipped roof covered with red clay tile. A small rectangular wing containing the penstock is appendaged on the north side. Although it contains just one story plus a partial basement, the structure is almost two stories high, the main generator room being over sixteen feet high. The most distinctive feature of its exterior appearance is the large windows with arched transoms. This arched motif is continued by means of a relief cast in the concrete walls even where large windows or doors are not used.

See Appendix, plate 103 for a photograph of its historical appearance.

Description of Existing Appearance and Conditions

This building appears to be structurally sound and virtually intact as to historic appearance except that the exterior wall surfaces have been painted. There has been some minor cracking and spalling of the concrete walls.

See Appendix, plate 104 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

All miscellaneous repairs should be effected. There is a strong possibility of roof deterioration which may require considerable replacement. Because this structure is nearly intact in its historic appearance, it is recommended that maintenance be geared to preserve this appearance, and that historic colors, etc. be restored during the next regular maintenance painting, etc. However, no specific restoration work is recommended at this time, and no estimate for such costs is given in the appendix.

Recommended Further Study

Additional consideration should be given to the value of preserving this building as an historic structure before any alteration or removal is undertaken. At the present time, this building continues to be used as an auxilliary power plant for the Mammoth Area, and no plans for its removal are contemplated.

ITEM	HISTORICAL CONDITIONS			EXISTING CONDITIONS		
1. USE	Power House			Power House (Auxillary)		
2. FLOORS	NO.	ATTIC	BASEMENT	NO.	ATTIC	BASEMENT
	1	No	Partial			
3. SIZE (overall)	DIMENSIONS		AREA	DIMENSIONS		AREA
Main Wing North Wing Total	31'x 76' 11'x 46'		2346 SF 506 2862			
4. ROOMS	NO.	REMARKS		NO.	REMARKS	
Mechanical Room Valve Room Penstock Room Generator Room Workshop Toilet Closet Total	1 1 1 1 1 1 1 7	This information obtained from construction drawings only. No physical investigation has been made.			No physical investigation of the interior has been made.	
5. UTILITIES		REMARKS			REMARKS	
WATER SEWER ELECTRICITY GAS / OIL	Yes Yes Yes	See item 4.			See item 4.	
6. EQUIPMENT	NO.	TYPE		NO.	TYPE	
WATER CLOSETS LAVATORIES TUBS SHOWERS SINKS WATER HEATER FURNACE / STOVES	1 1 1	See item 4. Steam heated boiler			See item 4.	

ITEM	HISTORICAL CONDITIONS	EXISTING CONDITIONS
7. EXTERIOR CONST.		
FOUNDATIONS		ORIGINAL
MATERIAL	Concrete	
CONSTRUCTION	PIP	
FINISH	Cement plaster	
COLOR	Natural	
REMARKS		
WALLS		ORIGINAL
MATERIAL	Concrete	
CONSTRUCTION	PIP	
FINISH	Cement plaster-natural	Paint
COLOR	Natural	Cream
REMARKS		
ROOF		ORIGINAL
CONSTRUCTION	Steel trusses, purlins, wood rafters	
UNDERLAYMENT	Felt	
ROOFING	Clay tile	
TYPE	French	
COLOR / FINISH	Red-unglazed	
REMARKS		High probability that roofing and underlayment deteriorated
TRIM		ORIGINAL
MATERIAL	Wood-metal gutters,etc.	
FINISH	Paint	
COLOR	Red, white	Cream
REMARKS		

Building Number: 62

Common Name: Store House

Historic Name: Quartermaster Oil House

Administrative Data

See page 69.

Historical Data

HS 62, Quartermaster Oil House, Army No. 41

One-story, "iron" building. Completed in 1903. Cost, $400. Contractor, Alexander Lyall. The exterior of this modest building (13 by 20 feet) has apparently changed considerably since the Army period.

It is located just below the plateau on which most of the fort structures stand. Because of that factor and because of its modest proportions, it does not play a significant role in the concept of preserving the overall appearance of the fort.

Present use: Store house
Sources: "Early Pictures"

Architectural Data

None.

Building Number: 2032

Common Name: Old Concessioner Building

Historic Name: Mail Carrier's Quarters, Hjelm House

Administrative Data

Order of Significance

This building is a non-classified historic structure.

Proposed Treatment

Demolition.

Operating Provisions

Continued National Park Service maintenance and operation until demolition. This structure appears to be a safety and fire hazard at the present time.

Cooperative Agreements

None.

Basic Data

RSP: None.
PCP: None.
Drawings: None.
Photographs: Photo-data book, Fort Yellowstone Vol. 4, HHA, WSC.

Historical Data

HS 2032, Mail Carrier's House, No Army Number

Log. Built about 1895 by a Mr. Roseborough who then had the mail contract between Livingston and Cooke City. This small establishment at Mammoth, on the northern fringe of the military reservation, was one

of three way stations occupied under a permit by the mail carrier. To the rear of the log house he had a stable (no longer standing) for his horses and, perhaps, one or two other outbuildings.

The structure underwent various other uses as the years passed. At one time it served as the residence of the superintendent of construction for the Yellowstone Park Company. Still later it was occupied by the winter caretaker of that company. It is still sometimes refered to as the "Caretaker's Cottage." And it is also known as the Hjelm House.

Present use: Unoccupied.

Sources: Report of the Secretary of the Interior (1893), p. 615; (1894), p. 653; (1895), p. 823; Yellowstone Archives, Letters Sent, 4, 1892-94, Anderson, July 7, 1893, to the Secretary of the Interior; Yellowstone Archives, Secretary of the Interior Letters, 23, Acting Secretary Thos. Ryan, May 5, 1904, to Acting Superintendent, Yellowstone; Mattison, p. 12.

Architectural Data

Description of Historic Appearance and Conditions

This building was originally a two story log structure, rectangular in plan, and having a low pitched gabled roof. It is located just north of the fire house, building 38, along the eastern edge of the terrace. A covered porch with a shed roof extends along the front of the original structure. It is believed that this porch is part of the original structure. It is believed that the building originally contained two rooms on the ground floor plus a sleeping loft on the second. Little additional information is available without extensive physical investigation.

Description of Existing Appearance and Conditions

A large lean-to addition with a shed roof has been added to the east of the structure. All roof surfaces are covered with wood shingles, a poor material due to the shallow pitch of the roofs, and these shingles are in a badly deteriorated condition

in some areas. The building is in a state of general deterioration, and would appear to constitute a serious fire and safety hazard. The building appears to have little or no foundations, and serious sub-floor deterioration is suspected, having settled badly in some areas.

See Appendix, plate 107 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

Demolition. While probably not beyond restoration, such treatment would be possible only at great cost, probably requiring dismantling and reassembly. It is doubtful that any historic value this building may have warrants such expense.

This building has no significant architectural merit in itself, and is generally incompatible with the structures comprising Fort Yellowstone. It is situated in a prominent location adjacent to the main boulevard, and in its present condition can only be considered an eyesore. It is doubtful that this building could serve any useful function upon restoration that could justify such costs. Due to the hazards this building presents, it is recommended that it be removed at the earliest possible date.

Building Number: 2051

Common Name: Haynes Studio

Historic Name: Haynes Studio

Recommended Further Study

Photographer Jack Haynes must certainly be considered one of the historic figures of Fort Yellowstone and Yellowstone Park in general, and therefore some historic importance must be attached to this structure regardless of its age.

No architectural or historical investigation of this structure has been made. Pending such investigation, it is recommended that this building be retained, not on the basis of its association with Fort Yellowstone but as an art gallery relating to the Yellowstone-Teton area, and that a prominent feature of this gallery be a permanent exhibit of Mr. Haynes' photographs, provided such could be obtained.

See Appendix, page 108 for a photo of its existing appearance.

Structure Number: None

Common Name: Firehole River Bridge (Fountain Freight Road)

Historic Name: Same

Administrative Data

Order of Significance

This is a non-classified historic structure.

Proposed Treatment

Undetermined. Adaptive restoration if retained.

Operating Provisions

Continued National Park Service Maintenance and operation unless demolished.

Cooperative Agreements

None.

Basic Data

Photographs: "Early Construction Photos," Yellowstone Archives; Photo-data book, Fort Yellowstone, Vol. 4, HHA, WSC.

Historical Data

This bridge was apparently built in 1916 by the Army over the Gibbon River on the Madison-Norris Road. In 1931 it was removed and installed in its present location over the Firehole river on the Fountain Freight Road.[1]

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1. "Early Construction Photos", an album of construction photos ca. 1930-31, Yellowstone National Park Archives.

Architectural Data

Description of Historical Appearance and Conditions

The bridge is basically a steel structure, with concrete abutments, log cribbing ,and a timber roadway. Basically, it consists of two hinged steel arches which are tied together with trussed braces and which support the roadway. The road timbers are carried by steel beams which are in turn supported by the arches. The roadway is flanked on either side with a latticed railing. The concrete abutments support the roadway at each end, and the roadway is held in place at the embankments by these abutments as well as by log cribbing.

See Appendix, plate 111 for a photograph of its erection in its present location.

Description of Existing Appearance and Conditions

At the time of its present installation, the hinged connections for the arches were placed right at the waterline, a condition which continues to exist at the present time. The reasons for such an error are not known, but the result was the creation of the worst possible corrosive conditions at the four most critical points of the structure, and these connections are badly deteriorated. The rest of the steel superstructure appears to be in good condition, as do the roadway timbers. One of the ornamental balls capping the end post of one of the railings is missing. The concrete abutments are badly spalled and cracked. A cursory investigation of their surface gives rise to some doubts as to their structural soundness. Likewise, the log cribbing is in very poor condition, having rotted completely away in some areas after thirty years of service.

See Appendix, plate 112 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

It is recommended that this structure be preserved only if it can continue to serve a useful function, especially in view of the fact that this is not its original installation. If it can continue to be useful, it is certainly a picturesque structure and worth preservation.

Preservation would involve the dismantling and reconstruction of the bridge. The foundations for the hinged connections for the bridge should be rebuilt so that these connections would be above the water line. The connections themselves should be replaced, as should the ends of the arches that connect to them. The concrete abutments should be rebuilt. Due to the fact that these abutments do not date to the Army period, and possibly bear no resemblance to the original condition, and because the logs are so subject to deterioration, it is recommended that the log cribbing not be replaced. The roadway could be retained by either re-designing the abutments to accomplish this effect, or a concrete beam cribbing of considerably more durability, but similar in appearance to the existing could be employed. The raising of the hinged connections above the water line would result in the consequent raising of the roadbed eighteen inches to two feet. This would, of course, have some effect on the visual appearance, as well as upon the roadway approaches.

Structure Number: None

Common Name: Gardiner Entrance Arch

Historic Name: "Roosevelt Arch"

Administrative Data

Order of Significance

This is a non-classified historic structure.

Proposed Treatment

Preservation.

Operating Provisions

Continued National Park Service maintenance.

Cooperative Agreements

None.

Basic Data

Photographs: "Early Construction Photos," Yellowstone Archives; Photo-data book, Fort Yellowstone, Vol. 4, HHA, WSC.

Historical Data

Entrance Arch, No Army Number

Sometimes called the Roosevelt Arch. Captain Hiram Chittenden designed and supervised the construction of this entrance arch at Gardiner in 1903. The best description of the structure was written by him in his book on Yellowstone:

> The entrance gate at Gardiner consists of two large towers 12 feet 8 inches square and 19 feet 8 inches apart, closed over by an arch the crown of which is 30 feet above

the ground. The entire structure is 50 feet high and is capped with a concrete roof shingled with clippings from the stone used in the arch.

The character of the masonry is entirely original. It consists of columnar basalt, taken from a quarry nearby, in approximately hexagonal prisms. These have been used just as found, with the least possible dressing, retaining their natural weather-worn condition. The points of the prisms project beyond the plane of the face and give to the whole structure a novel appearance as a masonry work.

The side of the structure which faces the[railroad] station is ornamented with three tablets. The largest is 3 feet 10 inches by 20 feet 8 inches, and bears the inscription, "For the benefit and enjoyment of the people" -- an extract from the Act creating the park. The smaller tablet on the left tower is inscribed, "Yellowstone National Park;' that on the right, "Created by Act of Congress March 1, 1872." These tablets were molded entirely of concrete. The forms for the letters were cut out in reverse with great accuracy [by the Stillwater Manufacturing Co., Stillwater, Minn.]. They were made so as to give a depressed letter in the concrete, and with a triangular cross-section, so as to be easily removed after the concrete was set.

Chittenden also described the general setting:

The Northern Pacific Railroad touches the Park boundary at the same point, and the railroad company proposed, in the erection of their station, to combine it with the government work in a manner to give an effective approach.

* * * * * *

> The railroad was made to terminate in a loop practically tangent to the boundary of the Park, and the government road likewise terminates in a loop tangent to the boundary at the same point. Between the two the station is located with a long train platform on one side and a coach platform on the other. The space within the loop of the government highway has been converted into a small park, planted with shrubbery and ornamented with a small pond, both of which are sustained by water brought from the Gardiner river.
>
> * * * * * *
>
> The loop and the park are in a depression in the hills, around the sides of which the road rises from the level of the station platform to a height of about 30 feet at the neck of the loop. Across this neck the Entrance Arch...has been built.
>
> * * * * * *
>
> Extending from the tower of the arch in both directions for a distance of about 30 feet are two wing walls 12 feet high, terminating in square towers about 14 feet high. From these towers, walls 8 feet high extend along each branch of the loop to the Park boundary.

President Theodore Roosevelt visited Yellowstone in April 1903. Chittenden had already begun work on the arch, and the President, at the conclusion of his visit on April 24, laid the cornerstone: "The President arrived at 4:00 P.M. and we all went immediately to the site of the laying where the ceremonies proceeded at once under Masonic auspices. After the laying we withdrew to an elevated platform on one part of the wall, and the

President delivered an address." Chittenden added a fascinating footnote concerning the ceremony. He said that Roosevelt himself "gave explicit instructions about the ceremonies... and in particular wanted me so to arrange it that the people would crowd in close to his stand. He said that to have fifty feet of empty space between him and his hearers robbed him of all his power over an audience. I suppose his near sight has something to do with it."

The arch still stands; however, today's visitor may take an alternative route on a service road in entering or leaving at Gardiner. The handsome railroad station is gone and one of the stone walls along one branch of the loop has been dismantled. The little "park" that Chittenden created inside the loop is not maintained in the same manner. It is now covered with grass and bushes and a few picnic tables stand here and there.

Once inside the arch, the visitor crosses a large level plain before reaching the canyon of the Gardiner River. Chittenden spent time and effort on "beautifying" the plain. At one time he planted alfalfa on it for feeding elk in the winter. The alfalfa grew very well. He also planted a half dozen sequoias imported from California. They did not thrive; all died within a year. The arch itself is much as it was in Chittenden's time. A portal in each of the towers is now closed with a board "door." Visitors may still drive through the arch and park nearby to take pictures of the enduring monument.

An excellent photograph of the overall scene at the arch may be found in Reau Campbell, Campbell's New Revised Second Edition of the Yellowstone Park (Chicago, 1913), p. 13.

Sources: Chittenden, p.246; Le Roy, pp. 24-25; Yellowstone Archives, 69, Reports on Roads, Bridges, & Improvements Up to 1909,[Chittenden],"Technical Report Upon the Improvement of Yellowstone National Park," 1909, p.49.

Architectural Data

Description of Historical Appearance and Conditions

See description in the Historical Data Section.

See Appendix, plate 109 for a photograph of its historic appearance.

Description of Existing Appearance and Conditions

The appearance of the arch remains generally intact. The only major alteration was the removal of a stone wing wall extending northward from the arch on the east side. This was done in 1930 by the National Park Service. The pedestrian portals have been boarded up and there has been some deterioration of the concrete cap and two lower tablets. The structure has lost much of its significance due to the fact that large numbers of visitors no longer come to the park by train into Gardiner, and consequently the handsome railroad station no longer stands and the park is virtually gone. Additionally, much of the automobile traffic now by-passes the arch, and there are currently plans for a new road alignment into Gardiner which would virtually eliminate all auto traffic through this structure.

See Appendix, plate 110 for a photograph of its existing appearance.

Historical Evidence Uncovered by Physical Investigations

None.

Recommended Treatment

The concrete cap and tablets should be repaired and all other structural or visual repairs effected as may be required.

The proposed new road alignment bypassing the arch appears to be both logical and desirable. It is therefore suggested that the above structure be

preserved and developed as a wayside historical exhibit commemorating the establishment of Yellowstone as the first National Park. The monumental scale of the structure and the sentiments expressed on it would seem to make it particularly appropriate for this purpose. The roadway could be retained for those who wish to ceremonially enter the park by this route, and parking spaces could be provided and the pedestrial portals re-opened for pedestrian use. Permanent outdoor exhibits explaining the significance of the site could provide the needed interpretation. The development of this area could be coupled with the construction of a new and badly needed entrance station at this point. The City of Gardiner should be encouraged to take a renewed interest in and develop the park on the Gardiner side of the arch.

It is hereby suggested that the above proposed development and designation of this site to commemorate the establishment of Yellowstone National Park would be a particularly appropriate project for the commemoration of the 1972 centennial.

Building Number: None

Common Name: Flagstaff

Historic Name: Flagstaff

Administrative Data

None.

Historical Data

Flagstaff, Army No. 57 (Not now existing)

In September 1891, the Secretary of the Interior wrote Captain Anderson: "If not done please erect flag staff at Park immediately. Garrison flag sent you to-day." Two civilians, John H. Donohue and John H. Hoffman, got the job of putting up the staff, probably on the plateau (parade ground) in front of the administrative building.

This first flagstaff was replaced in 1902 by a stepped staff from 75 to 100 feet high. The iron staff was anchored in a concrete foundation and rigged according to the current style. The cost of construction amounted to $500. Photographs show that it was of a type found at most major posts of that period. ("Early Pictures" records that the flagstaff was 100 feet high and erected in 1902. An inspector general wrote that the excavation for the 75-foot staff was then underway.)

Repairs on the staff were required from time to time. In 1909, for example, the post commander directed the quartermaster to "put the flag pole halyards in working order so that the flag may be hoisted."

In 1938, when the Mammoth section of the North Entrance Road was relocated, the army's flagstaff was dismantled and a section of it was relocated near the northwest corner of the former post - near the museum.

A photograph of the base of the large flagstaff may be found in Forest and Stream, 60, March 21, 1903, p. 222. This is a good photograph, but unfortunately some deer are in the way of part of the staff.

Present use: None

Sources: "Early Pictures;" Yellowstone Archives, Letters of Secretary of the Interior, 2, Secretary of the Interior Noble, Sept. 23, 1891, to Captain Anderson; and Acting Secretary of the Interior Gro. Chandler, Nov. 5, 1891, to Captain Anderson; NA, RG393, Fort Yellowstone, Letters Received, 1905-10, Box 4, 1st Lt. C.F. Martin, Adj., March 31, 1909, to Post QM; Haynes, p. 167; Yellowstone Archives, Letters of Secretary of the Interior, 21, Lt. Col. C.H. Heyl, IG, Feb. 1, 1902, to Secretary of War.

APPENDIX A

List of Military Structures by Army Numbers

(Numbers not listed were assigned to structures at other locations, mostly at soldier stations.)

Fort Yellowstone

Army No.	Name	When Built	Disposition	HS No.
1	Guard House (first)	1891	Present residence	9
2	Administrative Building	1891	Present residence	8
3	Double Officers Qtrs.	1891	Present residence	7
4	Double Officers Qtrs.	1891	Present residence	6
5	Cavalry Barracks	1891	Demolished	--
6	Commissary Store & Office	1891	Present residence	10
7	QM Store & Office	1891	Present residence	11
8	Granary	1891	Present residence	12
9	Bakery	1891	Present residence (moved)	24
10	Cavalry Stables	1891	Present vehicle storage	25
11	NC Staff Officers Qtrs.	1891	Present residence	31
12	NC Staff Officers Qtrs.	1891	Present residence	32
13	Root House	ca 1891	Demolished	--
14	First Hospital	1894	Demolished	--
15	Hay Shed	1893	Present storeroom	20
16	Fuel Shed, Off. Qtrs.	?	Demolished	--
17	Fuel Shed, Off. Qtrs.	?	Demolished	--
18	Fuel Shed, Off. Qtrs.	?	Demolished	--
19	Fuel Shed, Off. Qtrs.	?	Demolished	--
20	Fuel Shed, Off. Qtrs.	?	Demolished	--
21	Fuel Shed, NCO Qtrs.	?	Demolished	--
22	Fuel Shed, NCO Qtrs.	?	Demolished	--
23	Hospital Steward's Qtrs.	1894	Present residence	14
24	Root House	?	Demolished	--
25	Hay Shed, QM	ca 1897	Demolished	--
26	Double Off. Qtrs.	1897	Present residence	5
27	Double Off. Qtrs.	1897	Present residence	4
28	Cavalry Barracks	1897	Present warehouse	27
29	Chapel (this number was first assigned to the cavalry stables that burned in 1907)	1913	Present chapel	17
30	NC Staff Off. Qtrs.	1897	Present residence	30
31	NC Staff Off. Qtrs.	1897	Present residence	33

Army No.	Name	When Built	Disposition	HS No.
32	Coal Shed	1899	Demolished	--
33 34 39	QM Shop Building(s) (various functions)	1893	Present shop	22
35	Post Exchange & Gymnasium	1905	Present community services	35
36	Old Reservoir	1891	Demolished	--
36A	New Reservoir	1901	Demolished	--
37	Teamsters Qtrs	1901	Demolished	--
38	Troop Workshop	1901	Present paint shop	29
39	(See 33, above.)			
40	Old Power House	1902	Demolished	--
41	Oil House, QM	1903	Clorination House	62
42	Coal Shed	1903	Present shop	19
43	Wagon Shed, QM	1903	Demolished	--
44	Stables, QM	1904	Demolished	--
45	Shooting Galleries	1905	Demolished	--
46	Wagon Shed, QM	ca 1905	Demolished	--
47	Cavalry Stables	1907	½ demolished, ½ present vehicle maintenance	28
48	Cavalry Stables	1909	Storehouse	34
49	Cavalry Stables	1909	Present firehouse	38
50	Double Cavalry Barracks	1909	Present park headquarters	36
51	Shops and Guards	1909	Present blacksmith shop	37
52	Field Off. Qtrs.	1909	Present supt's residence	3
53	Double Captains Qtrs.	1909	Present residence	2
54	Bachelor Off. Qtrs. & Club	1909	Present museum, etc.	1
55	Hospital Annex	1909	Present residence	16
56	Root Cellar	ca 1909	Demolished	--
57	Flagstaff	1900	Demolished	--
60	Hospital Fuel Shed	?	Demolished	--
61	New Guard House	1911	Present jail	13
62	New Hospital	1913	Demolished	--
63	New Power Plant	1911	Present standby plant	56
64	Fire Engine House	?	Demolished	--
69	Morgue	ca 1898	Demolished	--
83	"Hook & Ladder" Building	?	Demolished	--
84	CO's Stable	?	Demolished	--

Camp Sheridan

Army No.	Name	When Built	Disposition	HS No.
1	Barracks	1886	Demolished	--
2	Warehouse	1886	Demolished	--
3	Guard House	1886	Demolished	--
4	Troop Stable	1886	Demolished	--
5	QM Stable	1886	Demolished	--
6	Hospital	1886	Demolished	--
7	Office Building	1886	Demolished	--
8	Officers Qtrs.	1886	Demolished	--
9	Magazine	1886	Demolished	--
	Camp Sheridan Buildings Listed as Still Standing In 1916 (No.'s 7 and 8 are probably the same as No.'s 7 and 8, above.)			
7	Blacksmith Qtrs.	--	Demolished	--
8	Quarters for Wheelwright & Plumber	--	Demolished	--
11	Ice House(s)	--	Demolished	--
14	Enlisted Men's Qtrs.	--	Demolished	--

Unnumbered Structures turned over to Interior, 1916

Water system
Sewer system
Lighting system
Cemetery

U. S. Engineer Buildings

Army No.	Name	When Built	Disposition	HS No.
--	Commissary & Storehouse	1902	Demolished	--
--	Shop	1902	Demolished	--
--	Shed	1902	Demolished	--
--	Shed	1902	Demolished	--
--	Stable	1902	Demolished	--
--	Bunkhouse	1902	Demolished	--
--	Office	1903	Present district ranger's office	39
--	Residence	1903	Seasonal Residence	40

APPENDIX B

List of Military Structures, by HS No.

HS No.	Present Name	Army Name	When Built	Army No.
1	Museum, etc.	BOQ and Club	1909	54
2	Residences	Double Captains Qtrs.	1909	53
3	Superintendent's Residence	Field Off. Qtrs.	1909	52
4	Residences	Double Off. Qtrs.	1897	27
5	Residences	Double Off. Qtrs.	1897	26
6	Residences	Double Off. Qtrs.	1891	4
7	Residences	Double Off. Qtrs.	1891	3
8	Residence	Administrative Bldg.	1891	2
9	Residence	First Guard House	1891	1
10	Residence	Commissary Store & Office	1891	6
11	Residence	QM Store & Office	1891	7
12	Residence	Granary	1891	8
13	Jail	New Guard House	1911	61
14	Residence	Hosp. Steward's Qtrs.	1894	23
16	Residence	Hospital Annex	1909	55
17	Chapel	Chapel	1913	29
19	Shop	Coal Shed	1903	42
20	Storeroom	Hay Shed	1893	15
22	Shop	QM Shop Bldg.(s)	1893	33, 34, 39
24	Residence	Bakery	1891	9
25	Vehicle Storage	Cavalry Stables	1891	10
27	Warehouse	Cavalry Barracks	1897	28
28	Vehicle Maintenance	Cavalry Stables (½)	1907	47
29	Paint Shop	Troop Workshop	1901	38
30	Residence	NCSO Quarters	1897	30
31	Residence	NCSO Quarters	1891	11
32	Residence	NCSO Quarters	1891	12
33	Residence	NCSO Quarters	1897	31
34	Storehouse	Cavalry Stables	1909	48
35	Community Services & Gym.	PX and Gym.	1905	35
36	Park Headquarters	Double Cavalry Barracks	1909	50
37	Blacksmith Shop	Shops & Guards	1909	51

HS No.	Present Name	Army Name	When Build	Army No.
38	Firehouse	Cavalry Stables	1909	49
39	District Ranger's Office	U. S. Engrs. Office	1903	--
40	Seasonal Residence	U. S. Engrs. Residence	1903	--
56	Standby Plant	New Power Plant	1911	63
62	Clorination House	QM Oil House	1903	41

Non-Military Structure

HS 49 U. S. Commissioner's Residence and Office. Built 1894.
2023 Mail Carrier's House (Hjelm House).

Military Structures not (yet) having HS numbers

Water system
Sewer system
Lighting system
Cemetery
Flagstaff (Army No. 57)
Roosevelt Arch.

APPENDIX C

The Scoyens at Fort Yellowstone

From the start, the Army erected its own administrative headquarters at Yellowstone, rather than use Norris' old blockhouse on Capitol Hill. Because of a continuing shortage of maintenance funds, the blockhouse deteriorated through the years. But whenever a shortage of housing occured, whether for a married enlisted man or a civilian employee, the blockhouse would be put into use as a temporary residence.

The Scoyen family was one of those who found themselves living in the structure beginning about 1894. Mr.Scoyen, a Norwegian, worked as a telephone man in the park. His wife served for many years as a matron in the post hospital. Their two sons, Clarence in 1895 and Eivind in 1896, were born in the blockhouse.

Clarence, known affectionately today as Pop, lived most of his life in Yellowstone. Today he is retired in Gardiner. His boyhood days at Mammoth were marked with the usual adventures of that age. Once he got into trouble with the Army for making a playground around the flagstaff. On another day he howled like a coyote and frightened off the deer that the officers had encouraged to feed on the parade ground. He "caught hell" for this prank.

In later years Clarence held a variety of jobs in the park: truck driver, dog team "Chauffeur", ice cutter, packer, winter keeper, postal worker, and more. In the 1950s he was a National Park Sevice employee, serving as voucher clerk and cost accounting clerk. An outgoing man, he made thousands of friends among the visitors to the park and in the community. Pop, also called "Mr. Yellowstone" by some, retired in 1965.

Eivind, who today lives in Palo Alto, California, recalls vividly their home in the blockhouse:

> Living on the summit of Capitol Hill, as I remember, was interesting by any standards which you care to select. Modern usage coined the term 'hostile environment.' That fitted exactly the summit of that hill. For more than half the year the vast expanse of the Park was buried under deep snows brought by savage blizzards, and subject to some of the lowest Arctic temperatures in the United States, outside of Alaska. And the 'Hill' suffered Yellowstone climate at its worst. Snowfall, however, was blown off the ground the second it lit.
>
> The flag pole with its brass ball on the very top of the tower provided intense excitement during the summer, spring and fall. There were static electricity displays around the pole, tower and the living room wall, at times driving the family out of the building at any time of the day or night, to refuge in the [Norris] chicken coop. I am certain that the tower was never struck from a bolt. Years later I was again a witness of lightning displays that equaled those on Capitol Hill and these were on the north rim of the Grand Canyon.

* * * * * *

> There was no water supply on the top. We had 3 or 4 fifty gallon whiskey barrels and on stated days an Army escort wagon refilled them for us. The barrels hardly lasted any winter and ruptured with sub-freezing temperatures. Whiskey barrels were easy to find around the Post for replacements.

Eivind Scoyen made the National Park Service

his career. At different times he was the superintendent of Zion and Glacier National Parks and the director of the Southwest Region, Santa Fe. At the time of his retirement in the early 1960s, he was an assistant director of the Service in Washington, D.C. He continues to be active in National Park affairs and is today a consultant to the Director.

The Scoyens continued to live in the Norris blockhouse until about 1899. By then Mrs. Scoyen, still a hospital matron earning $20 per month, was the sole support of her two sons. The family moved down the hill into one of the old army structures at Camp Sheridan. A few years later, about 1905, they returned to the blockhouse when their residence at the foot of the hill was razed to make way for a water flume. In the meantime, their mother had remarried, to an army teamster. Neither of the Scoyens recalls just how long they lived in the blockhouse on this second occasion.

Still later, the Scoyens lived in the old McCartney hotel in Clematis Gulch, behind the U.S Commissioner's house. Thus, because of a lack of adequate housing for non-military people, the brothers had the dubious honor of growing up in a variety of the most historic structures at Mammoth. In every case, the buildings had already declined from their best days. As housing, they were far inferior to the neat duplexes along officers row. None of the Scoyens' boyhood homes stand today.

Eivind Scoyen recalls some architectural details of the blockhouse:

> My recollection is that it was designed to house a military unit. There were four small rooms connected by a living area in the front and a large kitchen and dining area to the rear. Upstairs was a front room that I always thought of as the NCO's Office with a large squad room in the back.

* * * * *

Cut through the 14" log walls of this tower were about 15 rifle portholes. Inside, at the proper height, was a shelf on which the defenders could stand while firing.

* * * * *

The tower, as I remember it, was octagon shaped. The logs were installed in a vertical position. Again the workmen on the project did a superb job of fitting the corners of these logs. I would judge that the timbers were adzed or hewn flat to a point that no slug could penetrate between the timbers. The portholes were installed to meet the steep slope of the ground. There was no need to keep a lookout for an enemy from the air. There was no steel lining in the tower at our time.

Mr Scoyen notes with regret the Army's decision to tear down the blockhouse, his birthplace and the first national park headquarters: "Even in its terribly exposed location the fort survived all the stress imposed by the elements of a rugged and hostile climate, and the wear and tear of human occupancy and neglect for some years, but not the orderly housekeeping instincts of an Army commander who ordered it torn down." The wind still tears across the top of Capitol Hill. Only a few traces of the Norris blockhouse may be found.

APPENDIX D

Color Schedule

Color schedules given for all existing historic structures are as historically accurate as can be determined without detailed expert analysis. In the interest of creating a unified and cohesive appearance for the Mammoth Area, suggested compatible color schemes are also given for all major non historic NPS structures within the proposed Fort Yellowstone Historic District.

Group I Buildings:

Building No.
1. Museum (Bachelor Officers' Quarters)
2. Duplex Residence (Double Captains' Quarters)
3. Residence (Field Officer's Quarters)
34. Storehouse (Cavalry Stables)
36. Headquarters (Double Cavalry Barracks)
37. Blacksmith Shop
38. Fire Cache and Radio Shop (Cavalry Stables)
49. Residence (U.S. Commissioner's Residence)

These structures all date to the Army period and appear on the inventory of Historic Structures except for building 49. (This building is considered to be of prime historic significance, however.) The color scheme as proposed herewithin follows the original as nearly as can be determined. "White" here refers to a color matching the historic lead white, as opposed to the modern, bright, titanium white. Titanium paint may be softened with umber to produce the desired effect.

Buildings No. 1, 2, and 3.

White: Fascias, eaves, gutters and downspouts, door and window casings, soffits, porch ceilings, posts and railings, stair risers.

Red: Doors, window sash, storm sash, screens, dormer shingles.

Neutral Gray: Wood porch floors, stair treads.

Slate Gray: Vents, grills, flashing, miscellaneous metal items.

Building No. 34 and 38.

White: Fascias, eaves, gutters and downspouts, doors(except O.H. fire stall door on 38), door and window casings, soffits, monitor louvers and casings, loft hoists, steel door lintels, loading dock, masonry block additions[1].

Red: Window sash, storm sash and screens (if any), roof monitor shingles, roof shingles[2] on 38, O.H. fire stall door[3] on 38.

Slate Gray: Vents, grills, flashing, miscellaneous metal items.

Building No. 36.

White: Fascias, eaves, gutters and downspouts, door and window casings, soffits, porch ceilings and underside of 2nd and 3rd floor porch decks, porch posts and railings, stair risers.

Red: Doors, window sash, storm sash, screens, dormer shingles.

Neutral Gray: Wood porch floors, stair treads.

Slate Gray: Vents, grills, flashing, miscellaneous metal items.

Building No. 37.

White: Fascias, eaves, gutters and downspouts, doors, door and window casings, steel door lintels.

Red: Window sash, storm sash and screens (if any), roof monitor shingles, roof shingles[2], O.H. fire stall door[3].

Slate Gray: Vents, grills, flashing, miscellaneous metal items.

Building No. 49.

White: Fascias, eaves, gutters and downspouts, door and window casings, soffits, porch ceilings, posts, floor fascia and latticework, stair risers.

Red: Doors, window sash, storm sash, screens, dormer and gable wall shingles, roof shingles[2].

Neutral Gray: Wood porch floors, stair treads.

Slate Gray: Vents, grills, flashing, miscellaneous metal items.

Group II Buildings

Building No. 25. Carpenter Shop & Garage (Cavalry Stables)
27. Warehouse (Troop Barracks)
28. Wash Rack & Garage (Cavalry Stables)
29. Paint Shop (Workshop)
48. Garage
67. Fueling Service Station
75. Equipment Paint Shop & Garage
76. Equipment Garage
77. Equipment Garage
78. Storage
79. Auto Garage
334. Garage, Residence 49
396, 397, 398, 400. Small Metal Sheds

Of this group, buildings no. 25, 27, 28, and 29 are historic structures, although building 27

the only one currently on the Historic Structures Inventory. Color schedules are herewithin given for these four historic structures, and it is suggested that the balance of the structures be painted in a like manner.

Building No. 25.

White: Wood wall siding, siding at roof ventilators, door panels.

Red: Corner trim, fascias, soffits, water tables, door and window casings, door rails, window sash, roof ventilator louvers and trim, gutters and downspouts, metal shingle roof.

Paint out to nearest adjacent color all vents, grills, flashing, miscellaneous metal items.

Building No. 27

White: Wood wall siding, dormer sidings, gable shingles at east wing, porch ceilings, cupola louvers and trim, door panels.

Red: Corner trim, fascia, soffits, water tables, gutters and downspouts, porch deck fascia, and posts, door and window casings, door rails, window sash, storm sash, screens, stair risers and stringers, railings.

Neutral Gray: Wood porch decks, stair treads.

Paint out to nearest adjacent colors all vents, grills, flashing, miscellaneous metal items.

Building No. 28.

White: Wood wall siding, siding at roof ventilators, loft hoist, door panels.

Red: Corner trim, fascias, soffits, water tables, door and window casings, window sash, door rails, posts, ventilator louvers, gutters and downspouts, roof shingles[2].

Paint out to nearest adjacent color all vents, grills, flashing, miscellaneous metal items.

Building No. 29.

White: Wood wall siding, door panels.

Red: Corner trim, fascias, soffits, water tables, door and window casings, window sash, door rails, gutters and downspouts, roof shingles[2].

Paint out to nearest color all vents, grills, flashing, miscellaneous metal items.

Buildings 48, 67, 75, 76, 78, 79, 334, 396, 397, 398, 400: all are similar to buildings 25 - 29.

Group III Buildings

Building No. 19. Electric Shop & Garages (Coal Shed)
20. Storage Shed (Hay Shed)
22. Plumbing Shop (Shop buildings)

These structures all date to the Army period, though none appear on the Historic Structures Inventory. The historic colors are given here even though demolition is recommended in some instances. See sections regarding the individual structures.

Buildings No. 19, 20, 22.

White: None.

Red: The entire structure except for the loading docks, foundations, etc.

Neutral Gray: Loading docks.

Group IV Buildings

Building No. 13. Jail (New Guard House)
23. Automotive Shop
56. Powerhouse

Buildings 13 and 56 of this group are Historic Structures. It appears that the original finish of these structures was a natural cement-gray coat of stucco or cement plaster, not too distant in color from the natural gray of the stone buildings. (In fact, it was apparently the original intention to construct building 13 of stone.) Building 23 is not an historic structure. In view of the proposed treatment for building 13, it is suggested that a Group II color scheme similar to adjacent building 28 might be appropriate.

Buildings No. 13 and 56.

White: Fascias, eaves, soffits, gutters and downspouts, door and window casings.

Red: Doors, window sash, storm sash and screens (if any).

Natural Gray Stucco: All exterior wall and chimney surfaces with existing stucco finish.

Slate Gray: Vents, grills, flashing, miscellaneous metal items.

Building No. 23.

Group II Color Scheme similar to building 28 adjacent.

Group V Building

Building No. 35. Canteen (Post Exchange)

This building is an Historic Structure. Proposed work to be done prior to and concurrently with the repainting of this building is outlined in the report.

Building No. 35.

White: Wood wall siding, front portico columns, column base panels, portico ceiling, gables shingles, door panels.

Red: Corner trim, fascia, soffits, water table, door and window casings, door rails, window sash, storm sash, screens, gutters and downspouts, column and base trim, roof shingles.

Slate Gray: Roof vents, grills, miscellaneous metal items.

Natural: All exposed brick foundation surfaces, chimneys, etc.

Group VI Building

Building No. 70. Apartment Building

This structure is not yet considered an Historic Structure. The original color scheme is not known at this time, although it is known that the scored concrete walls at the second floor were painted a different color form the smooth concrete walls at the first floor. They appear to have the same color as the window casings and offset trim, and were probably red, similar to the existing trim color. However, it is felt that more pleasing proportions would be emphasized by painting both the upper and lower portions of the wall the same color. With this in mind, and with a view to unity throughout the Mammoth area, the following color schedule is suggested:

White: All exterior concrete walls above the stone foundations, except the offset trim, dormer walls.

Red: Fascias, soffits, gutters and downspouts, all offset concrete projections and trim, door and window casings, doors, window sash, shutters, storm sash, screens, dormer louvers and trim, metal roll-up doors and housings, corbels and second floor projections, metal porch railings.

Paint out to nearest adjacent color all vents, grills, flashing, miscellaneous metal items.

Group VII Buildings

Building No. 4. Duplex Residence (Double Officers' Quarters)
5. Duplex Residence (Double Officers' Quarters)
6. Duplex Residence (Double Officers' Quarters)
7. Duplex Residence (Double Officers' Quarters)
8. Residence (Administration Building)
9. Residence (Old Guard House)
10. Duplex Residence (Commissary)
11. Duplex Residence (Quartermaster Storehouse)
12. Duplex Residence (Granary)
14. Residence (Hospital Sergeant's Quarters)
16. Residence (Hospital Annex)
30. Residence (N.C.S. Quarters)
31. Residence (N.C.S. Quarters)
32. Residence (N.C.S. Quarters)
33. Residence (N.C.S. Quarters)

This group consists of those frame buildings dating to the Army period and not otherwise covered by the existing painting schedule. All but buildings 30 - 33 are currently included on the Historic Structures Inventory, and these are herewith recommended for such inclusion.

Buildings 4, 5, 6, 7.

White: Wood wall siding, dormer walls, porch ceilings, railings, knee braces, lattice-work, gables shingles.

Red: Corner trim, water tables, fascias, soffits, gutters and downspouts, porch posts, floor fascial, stair risers, stringers, window and door casings, doors, window sash, storm sash, screens, dormer trim.

Natural Gray: Porch floors and stair treads.

Natural Finish: All stone foundations, brick-work.

Slate Gray: Foundation vents, chimney braces, roof vents.

Paint out all flashing, wall vents, miscellaneous metal items to nearest adjacent color.

Buildings No. 8, 9.

White: Wood wall siding, dormer walls, porch ceilings, cupola louvers and trim, porch trellises[4], gable ventilator louvers.

Red: Corner trim, water tables, fascias, soffits, gutters and downspouts, porch posts, floor fascia, window and door casings, doors, window sash, storm sash, screens, dormer trim, metal shingles roofs.

Neutral Gray: All porch floors and stair treads.

Paint out to nearest adjacent color all vents, grills, flashing, miscellaneous metal items.

Buildings No. 10, 11, 12.

White: Wood wall siding, dormer siding, porch

ceilings, gable shingles, porch crawl space enclosures.

Red: Corner trim, water tables, fascias, soffits, gutters and downspouts, porch posts, stair risers, stringers and railings, window and door casings, doors, window sash, storm sash, screens, dormer trim, gable louvers and trim, metal shingle roofs[5].

Neutral Gray: Porch floors, stair treads.

Paint out to nearest adjacent color all vents, grills, flashing, miscellaneous metal items.

Buildings No. 14, 16.

White: Wood wall siding, dormer walls, porch ceilings, railings, door panels, building 16 only; latticework.

Red: Corner trim, water tables, fascias, soffits, gutters and downspouts, porch posts, knee braces, floor fascia, stair risers and stringers, window and door casings, doors (door rails only at panelled doors, building 16), window sash, storm sash, screens, dormer trim, metal roof shingles, building 14[5], wood shingles roof, building 16[2].

Neutral Gray: Porch floors, stair treads.

Paint out to nearest adjacent color all vents, grills, flashing, miscellaneous metal items.

Buildings No. 30, 31, 32, 33.

White: Wood wall siding, dormer siding, gable shingles, porch ceilings and upper and lower railings.

Red: Corner trim, water tables, fascias, soffits, gutters and downspouts, porch

posts, floor fascia, stair risers and stringers, window and door casings, doors, window sash, storm sash, screens, dormer trim, metal roof shingles.

Neutral Gray: Porch floors and stair treads.

Paint out to nearest adjacent color all vents, grills, flashing, miscellaneous metal items.

Group VIII Buildings

Building No. 17. Chapel
39. Ranger Office (U.S. Engineer's Office)

This group consists of those stone buildings dating to the Army period and not otherwise covered by the existing painting schedule.

Building 17.

No Painting is deemed necessary at this time unless the existing white trim is found to vary considerably from the white of the other structures. However, the composition shingles over the exterior entrance to the basement is noted to be in poor condition and should be repaired if sufficient funds remain. This is considered to be of low priority. It would be desirable to reroof this area with slate to match the rest of the building.

Building No. 39

Historic colors have not yet been established for this structure. However, this is a structure of prime historic significance and it is proposed that it be repainted to these historic colors upon their determination. Physical investigation revealed that such painting is needed, but there is evidence of some possible roof leakage, which should be repaired in conjunction with this undertaking.

NOTES:

1. An alternative might be a color closely matching the adjacent stone walls.

2. It is apparently Park Service policy to leave wood shingle roofs in their natural condition. It is suggested that it would be appropriate to follow this proceedure where the shingles have not previously been painted, but that perhaps these shingles should be coated with a fire retardant solution which will also aid in their preservation. Where the shingles have been previously painted, or where it is otherwise deemed appropriate to do so, it is suggested that these roofs be painted red, particularly where they are in close proximity to other red-roofed structures and otherwise follow the suggested color scheme.

3. This door would probably look best if it could match the rest of the red to be used throughout the area, but could be painted fire red as proposed if necessary.

4. It is suggested that the porch trellises be removed for the sake of historical appearance. However, if they are deemed necessary by the Park or the residents, this color is recommended.

APPENDIX E

Roof Inspection Report, Administration Building 36 (Double Cavalry Barracks)

On August 3, 1971, an inspection of this building was made by Maintenance Foreman Bob Quesenberry and Historical Architect David Battle to determine the condition of the roof of this structure and the extent of the necessary repairs. The results of this inspection as included in Mr. Battle's report are included herewith as follows, due to the high probability that similar conditions exist on all structures having tile roofs except as otherwise noted in the report.

Tile

The tile themselves seem generally to be deteriorating. Surface spalling is quite prevalent. To date, maintenance procedure has been to ignore the minor spalling; to seal the more serious breaks with asphalt cement and/or to glue the broken flakes back on with this material if they can be found; and to completely replace those tile damaged beyond repair.

This spalling problem is probably due to snow and ice action. However, some of the tile do seem to be exceptionally brittle. I accidently broke one of the tile while I was on the roof and upon examination of one of the pieces, I noted a discoloration of the tile around the outer surfaces of the tile to a depth of approximately 1/3 inch. The discoloration may be indicative of general deterioration of the tile itself, in which case the strength of the tile will have been substantially reduced.

Snow and Ice Buildup

There appears to be a greater instance of major damage requiring tile replacement along the eaves and particularly those areas where the roof pitch

decreases as it meets the porch areas. This would indicate the probability of damage due to ice build-up in this area. Snow probably melts due to heat loss from the building. This water then freezes where it meets the porch areas; the ice forms a dam, and water backs underneath the tile. The lesser pitch of the porch roof only aggravates this situation. The fact that the north end of the building appears to have suffered the greatest damage would tend to bear this out, as it is the only portion of the building presently occupied on the third floor.

Valleys

There has been some rather severe damage at the valleys particularly in the lower regions where they meet the porch roofs, and there is evidence on the underside of the roof sheathing that water has penetrated to the attic spaces in these areas. This is probably also due to snow and ice build-up, particularly in view of the location of major damage. The grouting that seals the underside of the tile in these areas is in bad shape, probably due to both frost action and age. In addition, the flashing is inadequate in these areas, being only 24" wide, and thus providing little protection from whatever water buildup may occur in these areas. The flashing itself, which is galvanized metal, does not show signs of excessive deterioration, however.

Ridges and Hips

The ridge and hip tile appear to be generally sound and in good condition.

Chimneys and Vent Flashing

The chimney and vent flashings appear to be in good condition. It is not known whether they are adequate in terms of surface area beneath the tile, however.

Gutters

The eave gutters appear to be sound and in good condition. The number of downspouts appear adequate to handle the runoff under most conditions. It is not known if they are clogged or not, but the gutters themselves were generally free of debris.

Underlayment

Several tile were removed and the roofing felt inspected. This felt underlayment has almost entirely disintegrated and offers little moisture protection.

The Roof Structure

The rafters and roof sheathing appear generally sound and in good condition with the exception of the north wing. The roof structure in this area has been badly damaged by fire at some time in the past, with the result that the original members retain very little structural integrity. New joists have been scabbed on to the old, and short pieces of 1 x 6 T&G sheathing carried by 1 x 2 ledgers nailed to the rafters support the sheathing between the rafters. See accompanying drawing. However, there does not appear to have been undue problems caused by this condition.

Recommendations

1. A determination should be made as to whether the tile are suffering from general deterioration and age or adverse physical conditions or both. The tile has been on these buildings for over 60 years, which is 2 to 3 times the normal life expectancy of most commonly used materials today; even if the tile is found to have reached the end of its useful life; it can hardly be faulted. In order to make a determination as to the causes of its deterioration, I am sending a sample to the manufacturer (the original manufacturer is still in existence)

for their inspection. I photographed samples of the various tile used (ridge tile, hip tile, end tile, etc.) and will forward these photographs to the manufacturer along with an area takeoff so that we may obtain a more accurate cost estimate based on their findings. (See preliminary cost estimate attached to this report). Depending on the results of these findings, a program of either partial or complete restoration of the roofing tile should be instituted.

Note: The tile manufacturer subsequently indicated that the tile did not appear to be suffering from any form of deterioration except that caused by adverse physical conditions. As a result, the estimated cost for the roofing repair included in Appendix F of this report is substantially less than the figure included with this report, due to the fact that it is now possible to estimate that only 50% of the tile needs to be replaced.

2. It is recommended that the floor of the attic space be insulated in order to reduce heat loss to this area and the resultant ice buildup problems. This should particularly be done to the north end of the building, and should be a prerequisite to any future occupation of the south end. It would be preferable, of course, to insulate the entire attic space at this time.

3. It is recommended that the tile be removed over the entire structure and the underlayment replaced. This could be done in sections if only the damaged tile are replaced. All flashings should be inspected and replaced as required. All valley flashings should be replaced to an adequate width, and preferably of copper or terne metal, in view of the durability of tile and its consequent long life expectancy.

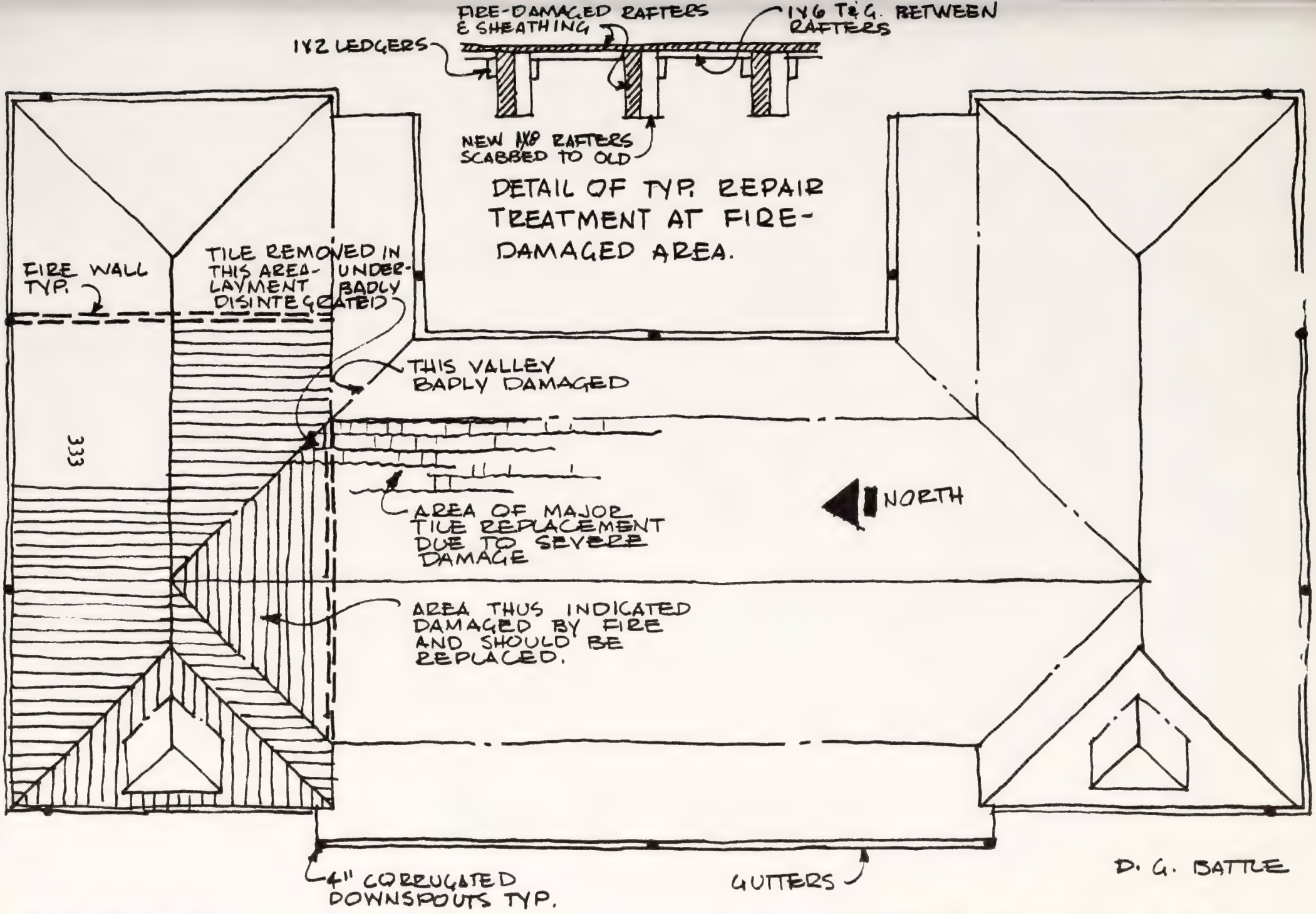
4. It is recommended that the portion of the roof structure damaged by fire be removed and replaced. While there do not appear to be undue problems arising from this existing condition, it is a make-

shift solution at best. Since it would never be easier or less expensive to replace this section of roof than when all the tile and underlayment have been removed, this would be cheap insurance against future problems.

These recommendations are based on physical investigation of the Administration Building (No. 36) only. However, since they are all of about the same age and construction, there is no reason to suppose that conditions on Buildings 1, 2, 3, 13, 37, and 39 should be any different. It would therefore seem wise that a major roofing project for all of these buildings be initiated, particularly if the tile as originally used on these buildings is no longer being manufactured as a stock item. Due to the fact that these are historic buildings scheduled for restoration to their historical exterior appearance it is extremely important that the new tile should match the existing original tile. Additionally, while Building No. 34 has been reroofed with tile which, for the most part, appears to match the original, the end and ridge tile do not, being both different in appearance and inferior in quality. Further, Building No. 38 has had its tile roof removed entirely and these have been replaced with wood shingles. The salvaged tile from this building have been used as replacement tile for the other structures. Restoration of this building will necessitate its eventual reroofing with tile once more. Consideration should be given to these factors as they may well affect the scope and ultimate cost of this project.

PRELIMINARY COST ESTIMATE

Scaffolding and hoist	$4,900
Remove existing tile and underlayment	6,400
Remove fire-damaged roof structure	2,700
Reframe roof (fire-damage area)	1,400
Resheath roof (fire-damage area)	1,000
Roofing felt (30#)	1,200
Flashing (copper)	1,900
Replace tile roofing (100%)	14,400
Remove attic flooring	2,300
Insulate attic floor	3,800
TOTAL	$40,000
Contractor's overhead and profit at 20%	8,000
NET PROJECT COST	$48,000
Project planning 15%	7,200
Construction supervision 12%	5,700
Contingencies and facilitating services 19%	9,100
GROSS PROJECT COST	$70,000



ROOF DRAINAGE:
100 S.F. ROOF AREA/S.I. LEADER.
GOOD

ROOF PLAN - FIELD INSPECTION - 8/5/71
ADMINISTRATION BLDG. #36.
MAMMOTH AREA - YELLOWSTONE N.P.

APPENDIX F

Preliminary Cost Estimate

Note should be made that the figures given in this estimate are based on 1971 prices and presume that all work listed for any given building is to be done concurrently, assuming that such items as scaffolding will be used by all trades concerned.

Building No. 1

Scaffolding	$2600
Masonry Repair	1500
Carpentry, Miscellaneous Repair	750
Roofing Repair (50% tile replacement)	11200
Insulate Attic	2400
Masonry Dampproofing	2100
Paint to Historic Colors	1300
Total	$21850

Building No. 2

Scaffolding	$1700
Masonry Repair	1500
Carpentry, Miscellaneous Repair	500
Roofing Repair (50% tile replacement)	8650
Insulate Attic	1700
Masonry Dampproofing	1350
Paint to Historic Colors	1250
Total	$16650

Building No. 3

Scaffolding	$1250
Masonry Repair (incl. chimney reconstr.)	2600
Miscellaneous Repairs	500
Roofing Repair (50% tile replacement)	6425
Insulate Attic	1050
Masonry Dampproofing	1000
Paint to Historic Colors	875
Total	$12700

Building No. 4

Carpentry, Miscellaneous Repair	$1000
Masonry Repair (incl. chimney reconstr.)	2900
Replace Gutters and Leaders	800
Reroof to Historic Material (tin shingles)	7000
Clean Paint from Brickwork	100
Paint to Historic Colors (incl. roof)	3400
Total	$14500

Building No. 5

See Building No. 4	$14500

Building No. 6

Carpentry, Miscellaneous Repair	$1500
Masonry Repair (incl. chimney reconstr.)	2900
Replace Gutters and Leaders	800
Reroof to Historic Material (tin shingles)	7000
Clean Paint from Brickwork	100
Paint to Historic Colors (incl. roof)	3400
Total	$15000

Building No. 7

See Building No. 6	$15000

Building No. 8

Carpentry, Miscellaneous Repair	$750
Masonry Repair (found, chimney)	650
Roofing Repair	1950
Paint to Historic Colors (incl. roof)	1650
Remove Additions	1500
Total	$6500

Building No. 9

Carpentry, Miscellaneous Repair	$1300
Masonry Repair (foundation, chimney)	1500
Roofing Repair	4600
Paint to Historic Colors (incl. roof)	2200
Total	$9600

Building No. 10

Carpentry, Miscellaneous Repair	$750
Roofing Repair	5500
Paint to Historic Colors (incl. roof)	2500
Total	$8750

Building No. 11

See Building No. 10	$8750

Building No. 12

See Building No. 10	$8750

Building No. 13

Scaffolding	$750
Structural and Concrete Wall Repairs	3000
Remove Paint and Refinish Ext. Conc. Walls	3000
Roofing Repair (50% tile replacement)	5450
Paint to Historic Colors	450
Total	$12650

Building No. 14

Carpentry, Miscellaneous Repairs	$1000
Masonry Repair	225
Roofing Repair	2300
Paint to Historic Colors (incl. roof)	1525
Total	$5050

Building No. 16

Carpentry, Miscellaneous Repairs	$750
Paint to Historic Colors	1200
Total	$1950

Building No. 17

Carpentry, Miscellaneous Repairs	$1150
Roofing Repair	500
Masonry Dampproofing	1550
Total	$2200

Building No. 19

	Miscellaneous Carpentry, Restoration	$6500
	Paint to Historic Colors	3500
	Total	$10000

Building No. 20

	Miscellaneous Carpentry, Restoration	$6500
	Paint to Historic Colors	3500
	Total	$10000

Building No. 22

	Demolition	$3750

Building No. 25

	Carpentry, Miscellaneous Repairs	$7500
	Demolish Additions	5000
	Repair Roofing	11500
	Paint to Historic Colors (incl. roof)	4500
	Total	$28500

Building No. 27

	Carpentry, Miscellaneous Repairs	$1500
	Masonry Repair (foundation, chimneys)	2100
	Roofing Repair	19100
	Paint to Historic Colors (incl. roof)	5500
	Total	$28200

Building No. 28

	Reconstruction to Original Appearance	$40000
	Paint to Historic Colors	7500
	Total	$47500

Building No. 29

Carp	Carpentry, Miscellaneous Repairs	$2000
	Remove Addition	1200
	Paint to Historic Colors	650
	Total	$3850

Building No. 30

	Carpentry, Miscellaneous Repairs	$1000
	Repair Roofing	2550
	Paint to Historic Colors	1700
	Total	$5250

Building No. 31

Carpentry, Miscellaneous Repairs	$1000
Repair Roofing	1900
Paint to Historic Colors (incl. roof)	1400
Total	$4300

Building No. 32

See Building No. 31	$4300

Building No. 33

See Building No. 31	$4300

Building No. 34

Carpentry, Miscellaneous Repairs	$500
Masonry Repair	500
Replace Ridge and Rake Roof Tile to Orig.	1000
Paint to Historic Colors	1800
Masonry Dampproofing	1400
Total	$5200

Building No. 35

Carpentry, Miscellaneous Repairs	$1500
Masonry Repair	1500
Remove Paint from Brick	350
Paint to Historic Colors	2250
Total	$5600

Building No. 36

Scaffolding	$5600
Masonry Repair	1500
Carpentry, Miscellaneous Repairs	750
Remove & Replace Fire Damaged Roof Structure	5100
Roofing Repair (50% replacement of tile)	25600
Insulate Attic	5000
Masonry Dampproofing	4475
Paint to Historic Colors	5575
Total	$53600

Building No. 37

Scaffolding	$850
Carpentry, Miscellaneous Repairs	150
Masonry Repair	500
Roofing Repair (50% tile replacement)	4950
Masonry Dampproofing	700
Paint to Historic Colors	250
Total	$7400

Building No. 38

Scaffolding	$850
Carpentry, Miscellaneous Repairs	500
Masonry Repair	500
Replace Tile Roof	24150
Masonry Dampproofing	1400
Paint to Historic Colors	1750
Total	$29750

Building No. 39

Scaffolding	$975
Masonry Repair	3000
Carpentry, Miscellaneous Repairs	500
Roofing Repair	3045
Insulate Attic	575
Masonry Dampproofing	880
Paint to Historic Colors	750
Restore, Remodel 3 Interior Floors for Use as Park Library, Archives	36000
Total	$45725

Building No. 40

Restoration, Repair, Paint, etc.	$7500

Building No. 49

Restoration, Repair, Paint, etc.	$2500

Gardiner Entrance Arch

Miscellaneous Repair	$2500

Restore Historic Flagpole	$2000
Replant Parade Ground to Lawn (Approx. 4 acres)	$8500
Total Construction Costs	$494625

COST ESTIMATE - RECAPITULATION

Building No.	1	$ 21850
	2	16650
	3	12700
	4	14500
	5	14500
	6	15000
	7	15000
	8	6500
	9	9600
	10	8750
	11	8750
	12	8750
	13	12650
	14	5050
	16	1950
	17	2200
	19	10000
	20	10000
	22	3750
	25	28500
	27	28200
	28	47500
	29	3850
	30	5250
	31	4300
	32	4300
	33	4300
	34	5200
	35	5600
	36	53600
	37	7400
	38	29750
	39	45725
	40	7500
	49	2500
	Gardiner Entrance Arch	22500
	Flagpole	2000
	Parade Ground	8500
	Total Construction Costs	$494625
Contractors' Overhead and Profit @ 20%		98925
	Net Project Cost	$593550
Project Planning @ 15%		89033
Construction Supervision @ 12%		71226
Contingencies and Facilitating Services @ 19%		112775
	Gross Project Cost	$866584

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Manuscript Material

Yellowstone National Park, Archives. At the time the Army left Yellowstone in 1916, it left many of its records in the custody of the new civilian superintendent. The park staff has continued to maintain and increase these archives in the ensuing years. The army material is well arranged in boxes or volumes, chronologically, and by subject. I used all pertinent volumes, including Letters Sent, Letters Received, Secretary of the Interior Letters, etc. Also researched were such special volumes as the Military Reservation, Post Cemetery, etc. Of special importance was "Early Pictures, Government Buildings, 1886 to 1912," 167. This volume is the Army's register of structures at the post. For each building there is a brief structural history and, usually, a photograph. A 36-page booklet, "Specifications for a Post Chapel, Plans No. 229A, At Fort Yellowstone, Wyoming," Office of the Quartermaster General, July 1911, is to be found in folder 52, vol. 104. Also of interest was the Ash Scrapbook, a miscelleneous collection of newspaper clippings put together by G. L. Henderson between 1882 and 1905. Henderson was an assistant superintendent of the park in pre-army days, and ran the Cottage Hotel at Mammoth during the army period.

I did not go through the National Park Service records, post-1917, that are in the Archives. This is a voluminous collection but is not complete. It is not yet as well indexed or catalogued as is the military collection. There is a scarcity of records covering the year the Army returned to the Park, 1917-18. Possibly they are buried in the NPS collection.

Yellowstone National Park, Research Library. This excellent library contains one of the best collections of published and unpublished documents concerning the park that may be found anywhere. In addition to the wide range of published documents, the following three manuscripts were found to be of importance: Chester A. Lindsley, "The Chronology of Yellowstone National Park, 1906 to 1939," typed, bound, 320 pages; Newell F. Hoyner, "History of Improvements in Yellowstone National Park," typed (Joyner was a junior park naturalist about 1930); and Charles Marble, "50 Years in and around YNP," 1932, typed, 20 pages and 3 pages of notes (Marble was a scout and a guide). Also used were several scrapbooks of newspaper clippings and photographs; these are identified by catalogue number in the appropriate footnotes.

National Archives. I by no means exhausted the archival material on Fort Yellowstone and the Army in the park. To have done so would have taken much more time and money. Instead, I concentrated on material, such as quartermaster and engineer records that contained a high percentage of data on structures. Of great use, as always, was Microcopy 671, Fort Yellowstone Post Returns, 1886-1916. I was not able to locate the returns for 1917-18. Record Group 92, Office of the Quartermaster General, Consolidated File, Fort Yellowstone was a basic collection; as was Record Group 77, Office, Chief of Engineers, in which I pursued Fort Yellowstone via published and unpublished indexes. The Engineer records contain an album of 166 plans of all active posts about 1910. This is index entry 413, "Plans of Army Forts in the United States." While its map of Fort Yellowstone had already been acquired through other sources, the album is a valuable tool for anyone working in histories of army posts. Also important was Record Group 393, U. S. Army Continental Commands, Fort Yellowstone, Letters Received, 1905-15 (7 boxes), and Letters Sent, 1903-06 (1 volume). Although far from complete, this source cannot be ignored.

Anyone doing research on the army period of Yellowstone is advised to make use of both the park archives and the National Archives. While there is some duplication, the two resources complement each other.

Special mention should be made of the Cartographic Division, National Archives. While the park has most of the original building plans and historic maps of the Mammoth, some additional and duplicate plans and maps are to be found in the National Archives. Of great importance was the discovery of the building plans and some documentary material on Norris Soldier Station, a structure now being restored.

The Still Pictures Division, National Archives, has only a few historic photographs of Fort Yellowstone. However these go back to the early days of the post and are important.

Washington State Historical Society. The research for this report coincided with a move of the Library, Washington State Historical Society, into new quarters. Thus, the Chittenden Collection at the Society could not be then made available. We have relied on the excellent H. M. Chittenden, A Western Epic, edited by Director Bruce LeRoy and published by that Society. When the material again becomes available, it would be worth an investigator's time to look at it.

National Park Service. Four studies that involve Fort Yellowstone have been prepared over the years by National Park Service personnel: Carl P. Russell, "A Concise History of Scientists and Scientific Investigations in Yellowstone National Park," mimeographed, 144 pages; this is an exhaustive bibliography that the late Mr. Russell prepared some years ago. It contains a historical bibliography as well as scientific. Merrill J. Mattes, "Yellowstone Cavalcade ," typed, 108 pages; a chronological listing by highlights from Yellowstone's history. Ray H. Mattison, "Report on Historical Structures at Yellowstone National Park," mimeographed, 34 pages; a preliminary investigation of structures throughout the park as of 1960. Aubrey L. Haines, "The Yellowstone Story," a monumental history of the park, prepared for the forthcoming Centennial.

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Form 10-300
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

(Type all entries – complete applicable sections)

STATE: Wyoming	
COUNTY: Park	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

1. NAME

COMMON: Mammoth Headquarters Area

AND/OR HISTORIC: Fort Yellowstone

2. LOCATION

STREET AND NUMBER: ---

CITY OR TOWN: Yellowstone National Park

STATE	CODE	COUNTY:	CODE
Wyoming		Park	

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
☒ District ☐ Building ☐ Site ☐ Structure ☐ Object	☒ Public ☐ Private ☐ Both	Public Acquisition: ☐ In Process ☐ Being Considered	☒ Occupied ☐ Unoccupied ☐ Preservation work in progress	X Yes: ☒ Restricted ☐ Unrestricted ☐ No

PRESENT USE *(Check One or More as Appropriate)*

☐ Agricultural	☒ Government	☒ Park	☐ Transportation	☐ Comments
☐ Commercial	☐ Industrial	☒ Private Residence	☐ Other *(Specify)*	
☐ Educational	☐ Military	☐ Religious		
☐ Entertainment	☒ Museum	☐ Scientific		

4. OWNER OF PROPERTY

OWNER'S NAME: U. S. Government

STREET AND NUMBER: ---

CITY OR TOWN:	STATE:	CODE
Yellowstone National Park	Wyoming	

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC: ---

STREET AND NUMBER:

CITY OR TOWN:	STATE	CODE

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY: ---

DATE OF SURVEY: ☐ Federal ☐ State ☐ County ☐ Local

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN:	STATE:	CODE

SEE INSTRUCTIONS

STATE: | COUNTY: | FOR NPS USE ONLY: ENTRY NUMBER | DATE

7. DESCRIPTION

CONDITION	(Check One)					
	[X] Excellent	[ ] Good	[ ] Fair	[ ] Deteriorated	[ ] Ruins	[ ] Unexposed
	(Check One)		(Check One)			
	[X] Altered	[ ] Unaltered	[ ] Moved	[X] Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (*if known*) PHYSICAL APPEARANCE

Fort Yellowstone is today the administrative headquarters for Yellowstone National Park. When the National Park Service took over the administration of the park in 1916, the fort consisted of approximately 70 structures, including barracks, officers quarters, a chapel, a hospital, water reservoirs, stables, storerooms, a guard house, etc. Construction began in 1891 and was substantially completed by 1910. The buildings were primarily of either frame or stone masonry construction. The stone structures were the last to be built and are particularly noteworthy architecturally. These were of cut sandstone with tile roofs, unusual both in terms of durability and appearance. The stone buildings still standing are: U. S. Engineer's Office (HS 39), Bachelor Officers Quarters (HS 1), Officers Quarters, Duplex (HS 2), Commanding Officers Quarters (HS 3), Two-company Barracks (HS 36), Blacksmith Shops (HS 37), Cavalry Stables (HS 34 and HS 38), and Chapel (HS 17).

The surviving structures today house the administrative offices and maintenance functions of the park and serve as residences of park personnel.

A complete listing of structures and their historic and present uses is to be found in Battle and Thompson, Fort Yellowstone, Historic Structure Report (1971).

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

- [ ] Pre-Columbian
- [ ] 15th Century
- [ ] 16th Century
- [ ] 17th Century
- [ ] 18th Century
- [x] 19th Century
- [x] 20th Century

SPECIFIC DATE(S) *(If Applicable and Known)*

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

- [ ] Aboriginal
- [ ] Prehistoric
- [ ] Historic
- [ ] Agriculture
- [x] Architecture
- [ ] Art
- [ ] Commerce
- [ ] Communications
- [x] Conservation
- [ ] Education
- [ ] Engineering
- [ ] Industry
- [ ] Invention
- [ ] Landscape Architecture
- [ ] Literature
- [x] Military
- [ ] Music
- [ ] Political
- [ ] Religion/Philosophy
- [ ] Science
- [ ] Sculpture
- [ ] Social/Humanitarian
- [ ] Theater
- [ ] Transportation
- [ ] Urban Planning
- [ ] Other *(Specify)* _____

STATEMENT OF SIGNIFICANCE

Fort Yellowstone, established in 1891, served as the administrative headquarters for Yellowstone National Park at a time when the U. S. Army was charged with the park's protection and development. From here, the Army administered the nation's first national park at an early time in the history of conservation. The post is still relatively intact and the handsome architecture of its structures presents in a vivid manner the historical appearance of a major permanent army post in the West at the turn of the century.

Following its transfer to the newly-created National Park Service in 1916, the post continued to house the functions and the people responsible for many of the policies that shaped the subsequent development of the National Park System.

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Aubrey L. Haines, "The Yellowstone Story."
David G. Battle and Erwin N. Thompson, Fort Yellowstone, Historic Structure Report.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY							OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES					
CORNER	LATITUDE			LONGITUDE				LATITUDE			LONGITUDE		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
NW	44°	58'	40"	110°	42'	21"		°	'	"	°	'	"
NE	44°	58'	40"	110°	41'	42"							
SE	44°	58'	18"	110°	41'	42"							
SW	44°	58'	18"	110°	42'	21"							

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 100 acres

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE:
David G. Battle, Hist. Arch. & Erwin N. Thompson, Hist.

ORGANIZATION
National Park Service, ESC and WSC

DATE
Sept. 1, 1971

STREET AND NUMBER:

CITY OR TOWN:

STATE

CODE

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☐ Local ☐

Name _____

Title _____

Date _____

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

_____
Chief, Office of Archeology and Historic Preservation

Date _____

ATTEST:

_____
Keeper of The National Register

Date _____

SEE INSTRUCTIONS

GP 0 901-087

Form 10-301
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY MAP FORM

(Type all entries - attach to or enclose with map)

STATE	
Wyoming	
COUNTY	
Park	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME

COMMON: Mammoth Headquarters Area

AND/OR HISTORIC: Fort Yellowstone

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN:

Yellowstone National Park

STATE:	CODE	COUNTY:	CODE
Wyoming		Park	

3. MAP REFERENCE

SOURCE:

Fort Yellowstone Historic Structure Report

SCALE: various

DATE: September 1971

4. REQUIREMENTS

TO BE INCLUDED ON ALL MAPS

1. Property broundaries where required.
2. North arrow.
3. Latitude and longitude reference.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

STATE	
Wyoming	
COUNTY	
Park	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME

COMMON: Mammoth Headquarters Area

AND/OR HISTORIC: Fort Yellowstone

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN:

Yellowstone National Park

STATE:	CODE	COUNTY:	CODE
Wyoming		Park	

3. PHOTO REFERENCE

PHOTO CREDIT: National Park Service and National Archives

DATE OF PHOTO: 1890-1971

NEGATIVE FILED AT:

Yellowstone National Park

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

Various historic and present-day photographs of Ft. Yellowstone

Form 10-300
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

(Type all entries – complete applicable sections)

STATE: **Montana**

COUNTY: **Park**

FOR NPS USE ONLY

ENTRY NUMBER	DATE

1. NAME

COMMON: **Gardiner Entrance Arch**

AND/OR HISTORIC: **Gardiner Entrance Arch or Roosevelt Arch**

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN: **Yellowstone National Park**

STATE	CODE	COUNTY:	CODE
Montana		**Park**	

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
☐ District ☐ Building ☐ Site ☒ Structure ☐ Object	☒ Public ☐ Private ☐ Both	Public Acquisition: ☐ In Process ☐ Being Considered	☐ Occupied ☒ Unoccupied ☐ Preservation work in progress	☒ Yes: ☐ Restricted ☒ Unrestricted ☐ No

PRESENT USE *(Check One or More as Appropriate)*

☐ Agricultural	☒ Government	☒ Park	☐ Transportation	☐ Comments
☐ Commercial	☐ Industrial	☐ Private Residence	☐ Other *(Specify)*	
☐ Educational	☐ Military	☐ Religious		
☐ Entertainment	☐ Museum	☐ Scientific		

4. OWNER OF PROPERTY

OWNER'S NAME: **U. S. Government**

STREET AND NUMBER:

CITY OR TOWN:	STATE:	CODE

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC:

STREET AND NUMBER:

CITY OR TOWN:	STATE	CODE

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

DATE OF SURVEY: ☐ Federal ☐ State ☐ County ☐ Local

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN:	STATE:	CODE

SEE INSTRUCTIONS

STATE: | COUNTY: | FOR NPS USE ONLY: ENTRY NUMBER | DATE

7. DESCRIPTION

CONDITION	(Check One)					
	☒ Excellent	☐ Good	☐ Fair	☐ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)		(Check One)			
	☒ Altered	☐ Unaltered	☐ Moved	☒ Original Site		

DESCRIBE THE PRESENT AND ORIGINAL *(if known)* PHYSICAL APPEARANCE

The Gardiner Entrance Arch (or Roosevelt Arch) is today almost of the same physical appearance as it was in 1903 when Capt. Hiram M. Chittenden, CE, constructed it. It consists of two large stone towers closed over by an arch 30 feet high and is capped with a concrete roof shingled with clippings of stone.

The masonry consists of columnar basalt of naturally-shaped hexagonal prisms, each stone retaining its natural weather-worn condition. The points of the prisms project beyond the plane of the face.

Three concrete tablets are on the structure. The largest bears the inscription, "For the benefit and enjoyment of the people." The smaller ones are inscribed: "Yellowstone National Park," and "Created by Act of Congress March 1, 1872."

The arch originally faced the Gardiner railroad station which is no longer existant. A small park is still located in front of the arch. The entrance road to the park still passes through the arch, but small pedestrian arches in each tower are now closed.

Extending from the towers in each direction for a distance of 30 feet are wing walls, 12 feet high, terminating in square towers about 14 feet high. Originally, 8-foot walls extended from these towers curving along the loop road in front of the arch. The eastermost of these low walls no longer exists.

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

- ☐ Pre-Columbian
- ☐ 15th Century
- ☐ 16th Century
- ☐ 17th Century
- ☐ 18th Century
- ☐ 19th Century
- ☒ 20th Century

SPECIFIC DATE(S) *(If Applicable and Known)*

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

- ☐ Aboriginal
  - ☐ Prehistoric
  - ☐ Historic
- ☐ Agriculture
- ☒ Architecture
- ☐ Art
- ☐ Commerce
- ☐ Communications
- ☒ Conservation
- ☐ Education
- ☐ Engineering
- ☐ Industry
- ☐ Invention
- ☒ Landscape Architecture
- ☐ Literature
- ☐ Military
- ☐ Music
- ☐ Political
- ☐ Religion/Philosophy
- ☐ Science
- ☐ Sculpture
- ☐ Social/Humanitarian
- ☐ Theater
- ☐ Transportation
- ☐ Urban Planning
- ☐ Other *(Specify)* _____

STATEMENT OF SIGNIFICANCE

This unique arch marking the north entrance to Yellowstone National Park, the nation's first national park, was designed and built Hiram M. Chittenden, then the U. S. Engineer Officer assigned to the park and in charge of road development. At this same time, 1903, Chittenden had already begun his immensely successful career as a historian of the West.

President Theodore Roosevelt, in a visit to the park in 1903, laid the cornerstone for the arch.

It has become a symbol that commemorates not only the contributions of these two men in history and conservation but also the National Park Idea.

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Aubrey L. Haines, "The Yellowstone Story".
David G. Battle and Erwin N. Thompson, Fort Yellowstone, Historic Structure Report.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY

CORNER	LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
NW	°	'	"	°	'	"
NE	°	'	"	°	'	"
SE	°	'	"	°	'	"
SW	°	'	"	°	'	"

OR

LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES

LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
45°	01'	48"	110°	42'	26"

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: Less than 1 acre

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE:
Erwin N. Thompson, Historian

ORGANIZATION
National Park Service, Eastern Service Center

DATE
Sept. 1, 1971

STREET AND NUMBER:

CITY OR TOWN:

STATE

CODE

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☐ Local ☐

Name _____

Title _____

Date _____

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

_____
Chief, Office of Archeology and Historic Preservation

Date _____

ATTEST:

_____
Keeper of The National Register

Date _____

SEE INSTRUCTIONS

GP 0 901.087

Form 10-301
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY MAP FORM

(Type all entries - attach to or enclose with map)

STATE	
Montana	
COUNTY	
Park	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME

COMMON: Gardiner Entrance Arch

AND/OR HISTORIC: Gardiner Entrance Arch or Roosevelt Arch

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN: Yellowstone National Park

STATE:	CODE	COUNTY:	CODE
Montana		Park	

3. MAP REFERENCE

SOURCE: USGS, Yellowstone National Park, Wyo.-Mont.-Idaho

SCALE: 1:125,000

DATE: 1961

4. REQUIREMENTS

TO BE INCLUDED ON ALL MAPS

1. Property broundaries where required.
2. North arrow.
3. Latitude and longitude reference.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

STATE	
Montana	
COUNTY	
Park	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME

COMMON: Gardiner Entrance Arch

AND/OR HISTORIC: Gardiner Entrance Arch or Roosevelt Arch

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN: Yellowstone National Park

STATE:	CODE	COUNTY:	CODE
Montana		Park	

3. PHOTO REFERENCE

PHOTO CREDIT: National Park Service

DATE OF PHOTO: ---

NEGATIVE FILED AT: Yellowstone National Park

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

Looking South, toward park.

ILLUSTRATIONS AND MAPS

PLATE 1. NORRIS BLOCKHOUSE, 1879 - 1910

Constructed atop Capitol Hill in 1879 by Philetus W. Norris, second superintendent of Yellowstone National Park, this building served as the Park's first permanent headquarters.

Yellowstone National Park Archives



PLATE 2. CAMP SHERIDAN, 1886 - 1891

Begun in 1886, Camp Sheridan was the first Army post at Yellowstone, and the forerunner of Fort Yellowstone. Both Camp Sheridan and the Norris Blockhouse continued to be used by the Army long after the construction of permanent headquarters at Fort Yellowstone.

Yellowstone National Park Archives



PLATE 3. FORT YELLOWSTONE CA. 1892

The first major construction effort in 1891 established basic layout and character of Fort Yellowstone. See also map 2.

National Archives

PLATE 4. FORT YELLOWSTONE, CA 1898

The second stage of construction, occuring in 1897, saw the addition of two more Officers' Duplexes, two additional N.C.S. residences, a second barracks and a hay shed. See map 3. The new Post Exchange, built in 1905, had not yet been constructed when this photo was taken.

Yellowstone National Park Archives



PLATE 5. FORT YELLOWSTONE, CA 1909

Fort Yellowstone was substantially complete when this photograph was made. Only the new Guard House, the second Hospital and the Chapel were yet to be constructed. See map 4.

Yellowstone National Park Archives



PLATE 6. FORT YELLOWSTONE, 1971

After continuing to serve as park headquarters under National Park Service Administration for more than fifty years, the area continues to retain its basic appearance and character. See also map 5.

Photo by William Keller

PLATE 7. PARADE GROUND, CA. 1898

The Parade Ground and Officers' Row beyond presented a stark military appearance. The Haynes Studio on the right was moved to another location in 1902.

National Archives



PLATE 8. FIRST RESERVOIR

Constructed in 1897, this 100,000 gallon reservoir located in Clematis Gulch provided water for the post until the construction of a much larger reservoir several years later.

Yellowstone National Park Archives

PLATE 9. SECOND RESERVOIR

With a capacity of nearly 2,000,000 gallons, this reservoir provided the means to generate electricity for the electrification of the fort and made it possible to landscape the area by providing a source of irrigation water.

Yellowstone National Park Archives

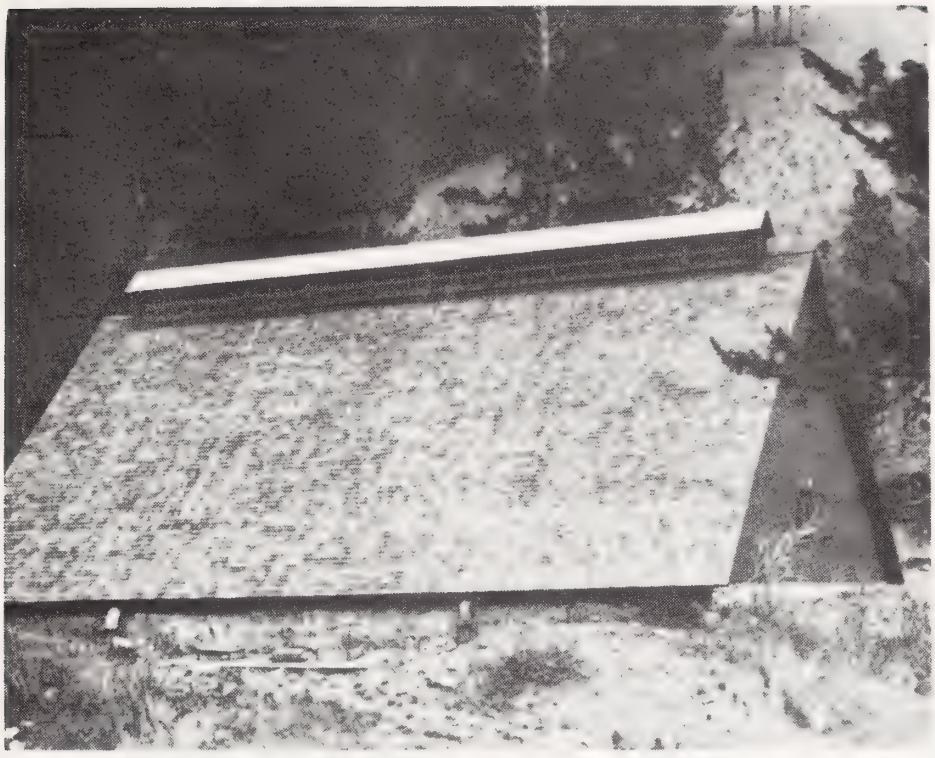




PLATE 10. IRRIGATION FOUNTAIN

This fountain was located near the U.S. Commissioner's residence (Building 49). It was used to reduce the water pressure and to distribute the water for irrigation purposes.

Yellowstone National Park Archives



PLATE 11. AQUEDUCT

Water was brought to the penstock for the first powerhouse via this concrete structure.

Yellowstone National Park Archives

PLATE 12. FIRST POWERHOUSE

Constructed in 1902, this plant provided light and power for Fort Yellowstone until a new and larger plant replaced it in 1911.

Yellowstone National Park Archives




BERRY'S PHOTO.

PLATE 13. FIRST HOSPITAL

Constructed in 1894, it had a capacity of 8 to 10 beds. Upon completion of a second and larger hospital in 1913, this building became the new Administration Building for the post.

Yellowstone National Park Archives

PLATE 14. SECOND HOSPITAL

This handsome building provided hospital services to the area until it was replaced by a new but somewhat less distinctive structure in 1963. See plate 20. Demolished in 1965.

Yellowstone National Park Archives


PERRY'S PHOTO



PLATE 15. HOSPITAL MORGUE

Constructed in 1898, this structure was an adjunct to the first hospital.

Yellowstone National Park Archives

PLATE 16. CAVALRY BARRACKS (BUILDING NO. 26)

Almost identical to building 27, which still remains, this building was one of the original buildings constructed in 1891 as part of the permanent post. Demolished by the National Park Service, the site now contains a vehicle storage area and fueling station.

Yellowstone National Park Archives





PLATE 17. U. S. WEATHER BUREAU

This building was very much a part of the Fort Yellowstone scene for many years.

Yellowstone National Park Archives

PLATE 18. MAMMOTH HOTEL

This structure provided accomodations for visitors to the area throughout the period of the Army's administration of the park. An extensive wing was later added to the extreme right of the structure as shown here. This building was demolished in 1936, although the added wing remained and forms the major portion of the existing Mammoth Inn.

Yellowstone National Park Archives




1476

PLATE 19. POST OFFICE

One of the four major structures added to the area within the boundaries of the original reserve since the Army's departure.

Photo by Charles S. Pope

PLATE 20. CLINIC

Another and most recent of the additions, its appearance is the least in keeping with the character of the area.

Photo by David G. Battle





PLATE 21. APARTMENT BUILDING

Built by the National Park Service in 1934, this building stands on the site originally occupied by the post bakery.

Photo by David G. Battle



PLATE 22. UTILITY BUILDING NO. 23

A portion of the Cavalry Stables, building 28, was demolished to make way for this structure, built by the National Park Service in 1935.

Photo by Stanley Cantor



PLATE 23. BUILDING NO. 1, CA. 1910

Constructed in 1909 as the Bachelor Officers Quarters and Club, it also provided temporary quarters for visiting personnel.

Yellowstone National Park Archives

PLATE 24. BUILDING NO. 1, 1969

This building now serves as a visitor center and museum. It also houses the park library and archives.

Photo by Charles S. Pope





PLATE 25. BUILDING NO. 2, CA. 1910

This duplex officers's residence was constructed in 1909.

Yellowstone National Park Archives

PLATE 26. BUILDING NO. 2, 1969

62 years later, it is still a duplex residence, now occupied by park personnel.

Photo by Charles S. Pope





PLATE 27. BUILDING NO. 3, CA. 1910

This field officer's quarters was built in 1909 to house the army superintendent of the park.

Yellowstone National Park Archives

PLATE 28. BUILDING NO. 3, 1969

It now houses the civilian superintendent of the park.

Photo by Charles S. Pope





PLATE 29. BUILDING NO. 4, CA. 1910

A duplex officers residence constructed in 1897.

Yellowstone National Park Archives

PLATE 30. BUILDING NO. 4, 1969

Still in use as a duplex residence, it retains its basic historical appearance.

Photo by Charles S. Pope





PLATE 31. BUILDING NO. 5, CA. 1910

The twin of Building No. 4, it was also constructed in 1897.

Yellowstone National Park Archives

PLATE 32. BUILDING NO. 5, 1970

Only superficial changes mark the passage of time.

Photo by David G. Battle





PLATE 33. BUILDINGS 6 and 7, CA. 1891

These duplex officers quarters were among the first permanent buildings constructed in 1891.

National Archives



PLATE 34. BUILDING NO. 6, CA. 1916

Some planting and landscape improvements had been made by the time this photograph was taken, but the appearance of the building itself remained the same.

Yellowstone National Park Archives.

PLATE 35. BUILDING NO. 6, 1970

Although the landscaping has changed, as well as the color scheme and roofing material, the building continues to retain its basic historic appearance.

Photo by David G. Battle





PLATE 36. BUILDING NO.7, CA. 1916

Duplex officers quarters.

Yellowstone National Park Archives

PLATE 37. BUILDING NO. 7, 1970

This building also retains its basic appearance.

Photo by David G. Battle


BERRY'S PHOTO.



PLATE 38. BUILDING NO. 8, CA. 1916

This building was the administration building for the post. The main wing to the left of the photograph was constructed in 1891. The wing on the right side of the photograph was probably added in 1901. In 1913, upon completion of the second hospital, the Army converted the first hospital to use as an administration building, and this building was relegated to the status of storehouse.

Yellowstone National Park Archives.

PLATE 39. BUILDING NO. 8, 1969

The wing at the left is the twin of the one shown in plate 38. It is believed that this was also added by the Army about the same time as the one above. Aside from minor changes, such as the lattices on the porch, its appearance remains much the same, although now used as a residence.

Photo by Charles S. Pope





PLATE 40. BUILDING NO. 9, CA. 1916

Another of the first buildings constructed in 1891, this was the guard house.

Yellowstone National Park Archives

PLATE 41. BUILDING NO. 9, 1969

Changes in fenestration to accomodate its use as a residence, the removal of one chimney and the addition of lattices to the porch alter its original appearance only slightly.

Photo by Charles S. Pope


BERRY'S PHOTO



PLATE 42. BUILDING NO. 10, CA. 1892

This building was constructed in 1891 as the commissary storehouse. It was enlarged in 1900 by means of a thirty foot addition at the far (south) end of the building, but the basic appearance and details were retained.

National Archives

PLATE 43. BUILDING NO. 10, 1970

The building has been altered somewhat by its conversion to use as a duplex residence.

Photo by David G. Battle





PLATE 44. BUILDING NO. 11, CA. 1892

Virtually identical to Building 10, it served as the quartermaster storehouse. It was also given a 30-foot addition in 1898.

National Archives

PLATE 45. BUILDING NO. 11, 1970

Also converted to residential use, its appearance continues to be nearly identical to that of building 10.

Photo by David G. Battle





PLATE 46. BUILDING NO. 12, CA. 1892

Constructed to the same basic shape and details as buildings 10 and 11, its use as a granary caused it to deviate in such details as fenestration. In 1910, it also was extended by 30 feet.

National Archives

PLATE 47. BUILDING NO. 12, 1970

The present appearance of this building is much closer to that of buildings 10 and 11 today , due to the fact that it too has been converted to a duplex residence.





PLATE 48. BUILDING NO. 13, CA. 1916

In 1911, this new and larger guard house replaced building 9.

Yellowstone National Park Archives

PLATE 49. BUILDING NO. 13, 1970

Still in use as a jail house, its appearance has changed very little. It has suffered some structural damage, however. Note the severe cracks in the concrete wall over the double doors.

Photo by David G. Battle





PLATE 50. BUILDING NO. 14, CA. 1894

Built in 1894 to house the hospital steward, this is how the building originally looked. A dormer was added to the second floor over the porch by the Army sometime prior to 1916. It can be seen in Plate 51.

National Archives

PLATE 51. BUILDING NO. 14, 1970

The building continues to serve as a residence, having been altered only slightly since the Army's departure.

Photo by David G. Battle





PLATE 52. BUILDING NO. 16, CA. 1916

Built in 1909, this building augmented the capacity of the old hospital until the new one was constructed in 1913. It was primarily used to house hospital staff.

Yellowstone National Park Archives

PLATE 53. BUILDING NO. 16, 1970

Although this building has undergone some changes and is now used as a residence, much of the original character remains. It has not been determined if the porch is part of the original structure.

Photo by David G. Battle


DERRY'S PHOTO



PLATE 54. BUILDING NO. 17, CA. 1916

Completed in 1913, this interdenominational chapel was one of the last and most handsome of the army structures.

Yellowstone National Park Archives

PLATE 55. BUILDING NO. 17, 1969

The chapel today is one of the best preserved and maintained historic structures at Fort Yellowstone, having undergone only minor alterations. Its pleasant park-like setting is marred only by the uncomfortable proximity of a warehouse, albeit an historic one (building no. 19, see plates 58 and 59), which may be seen at the rear on the left of the photo.

Photo by Charles S. Pope





PLATE 56. BUILDING NO. 17, INTERIOR, 1971

The finely detailed interior is virtually unchanged.

Photo by David G. Battle

PLATE 57. BUILDING NO. 17, PULPIT, 1971

Equally handsome furnishings, such as this pulpit, have also been preserved.

Photo by David G. Battle





PLATE 58. BUILDING NO. 19, CA. 1916

This undistinguished structure was constructed in 1903 for use as a coal shed. The dark monotone color of the building as shown here was barn red.

Yellowstone National Park Archives

PLATE 59. BUILDING NO. 19, 1971

Considerably altered, it appears to be in somewhat better shape today than when the above photo was taken. The basic lines remain intact. Its situation relative to the chapel is unfortunate, however, and detracts somewhat from that relatively outstanding building. Restoration of Building 19 would emphasize this condition.

Photo by David G. Battle





PLATE 60. BUILDINGS NO. 20 AND 21, CA. 1898

Building 20, on the right, was constructed as a hay shed in 1893. In 1910, it was extended 79 feet on the near north end. Building 21, on the left, also a hay shed, was constructed in 1897 and was demolished by the National Park Service several years ago.

National Archives

PLATE 61. BUILDING NO. 20, CA. 1916

This photo shows the addition. Note that this addition was not given a hipped roof treatment to match the original construction.

Yellowstone National Park Archives

PLATE 62. BUILDING NO. 20, 1971

Like building 19, it has been extensively altered and its present condition appears somewhat better than in the photo above.

Photo by David G. Battle





PLATE 63. BUILDING NO. 22, CA. 1916

Little more than a series of sheds, this structure was listed as three separate buildings by the Army, and were generally called the quartermaster shops.

Yellowstone National Park Archives

PLATE 64. BUILDING NO. 22, 1971

Another structure whose present condition appears somewhat more substantial than its historic condition.

Photo by David G. Battle





PLATE 65. BAKERY, CA. 1916

This one-story frame building housed the post bakery.

Yellowstone National Park Archives

PLATE 66. BUILDING NO. 24, 1970

In 1934, the National Park Service moved the bakery building to make way for a new apartment building (see plate 21). It was relocated to the east of the post at the edge of the terrace and converted to residential use. The near wing as seen in this photo is the original bakery, the wing at the rear was added at the time of its relocation.

Photo by David G. Battle

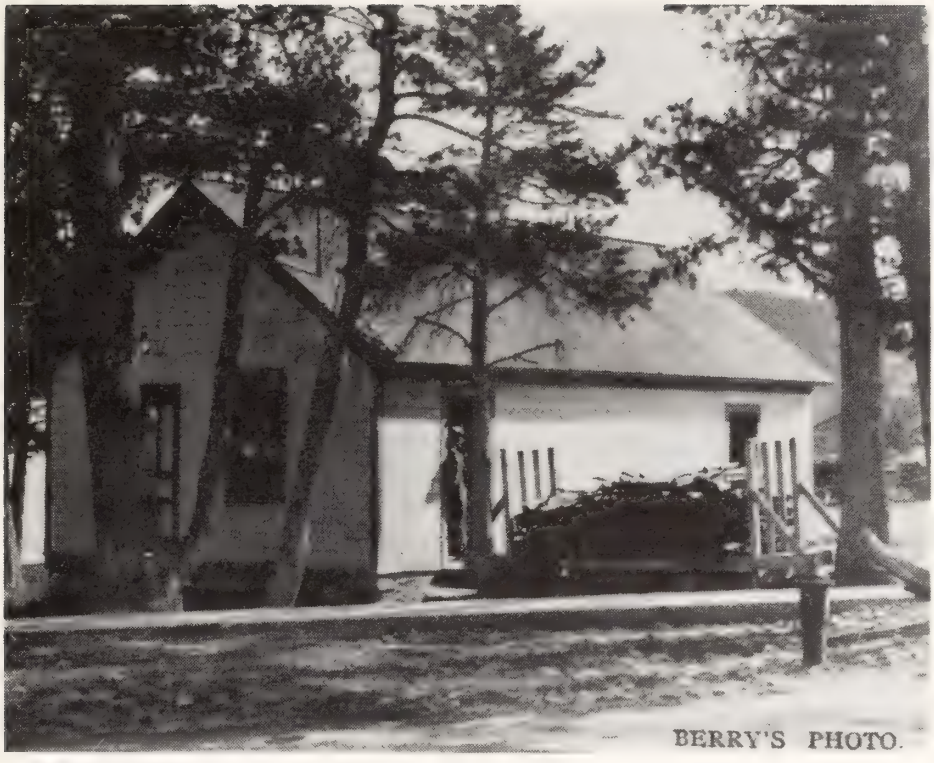

BERRY'S PHOTO.



PLATE 67. BUILDING NO. 25, CA. 1916

Another of the 1891 structures, this frame building was a cavalry stable.

Yellowstone National Park Archives

PLATE 68. BUILDING NO. 25, 1970

Rather extensively altered and now having substantial additions, it now houses the carpenter shops. Nevertheless, it retains its basic lines and is and important element in defining the original post layout.

Photo by David G. Battle





PLATE 69. BUILDING NO. 27, CA. 1916

Built in 1897, this cavalry barracks was nearly identical to the first (see plate 16). It was a major element in the expansion of the post that year in order to accomodate a second company of troops.

Yellowstone National Park Archives

PLATE 70. BUILDING NO. 27, 1969

Aside from paint colors and some fenestration changes, it retains much of its historic appearance. It is now used as a warehouse. However, its design and location would make it an ideal community building, which usage would also facilitate its restoration.

Photo by Charles S. Pope





PLATE 71. BUILDING NO. 27, INTERIOR (Date unknown)

Interesting interpretive possibilities regarding this important aspect of military life at Fort Yellowstone could be afforded by restoring and refurnishing a portion of the interior of this building to its historic appearance.

National Archives

PLATE 72. BUILDING NO. 28, CA. 1916

This frame cavalry stable was built in 1907 to replace an 1897 stable similar to building 25 and which was destoyed by fire earlier in the year.

Yellowstone National Park Archives

PLATE 73. BUILDING NO. 28, 1969

A major portion of the building was removed in 1935 to make room for a new National Park Service utility building (see plate 22). Extensively altered, only the basic shape remains.

Photo by Charles S. Pope





PLATE 74. BUILDING NO. 29, CA. 1916

This frame building was built in 1901 to house the troop workshops.

Yellowstone National Park Archives

PLATE 75. BUILDING NO. 29, 1971

A wing has been added to the south side of the building, and it is now used as the paint shop.

Photo by David G. Battle





PLATE 76. BUILDINGS NO. 31 and 32, CA. 1892

These two N.C.S. quarters were among the first Fort Yellowstone structures, built in 1891. Originally somewhat remotely located, the expansion of the post eventually found them situated uncomfortably close to the stables. The 1897 expansion added two more similar structures, one at each end.

National Archives

PLATE 77. BUILDING NO. 30, CA. 1916

One of the 1897 N.C.S. structures, it was the southern-most building in the row of staff sergeants quarters.

PLATE 78. BUILDING NO. 30, 1970

A rather extensive wing has been added on the north side.

Photo by David G. Battle


BERRY'S PHOTO.



PLATE 79. BUILDING NO. 31, CA. 1916

When this photo was taken, the appearance of this set of quarters had not changed from when it was built. See plate 76.

Yellowstone National Park Archives

PLATE 80. BUILDING NO. 31, 1970

The trees have matured considerably, but only the superficial changes alter its historic appearance.

Photo by David G. Battle





PLATE 81. BUILDING NO. 32, CA. 1916

Neat, trim ,and compact, the design of these N.C.S. residences was in many ways superior to the officers' quarters, though much smaller.

Yellowstone National Park Archives

PLATE 82. BUILDING NO. 32, 1970

Recently remodeled on the interior, these buildings still provide comfortable and pleasant quarters for park service personnel.

Photo by David G. Battle





PLATE 83. BUILDING NO. 33, CA. 1916

The northernmost building on the staff sergeants row, it was also built in 1897.

Yellowstone National Park Archives

PLATE 84. BUILDING NO. 33, 1970

Like the others, the appearance of building 33 has changed little over the years.

Photo by David G. Battle





PLATE 85. BUILDING NO. 34, CA. 1916

Similar in design to building 28, this cavalry stable was one of two constructed of stone in 1909.

Yellowstone National Park Archives

PLATE 86. BUILDING NO. 34, 1970

Aside from some fenestration changes and minor design variations in the tile roof, which has been completely replaced, the historic appearance of this building remains the same to the casual visitor. Extensive additions on the east side of the building are not readily noticeable unless one enters the service yard.

Photo by David G. Battle





PLATE 87. BUILDING NO. 35, CA. 1916

The most imposing of the frame structures at Fort Yellowstone, the Post Exchange was built in 1905. It replaced an earlier building which may be seen in plate 4.

Yellowstone National Park Archives

PLATE 88. BUILDING NO. 35, 1969

The colors are different, but it still retains its classical appearance.

Photo by Charles S. Pope





PLATE 89. BUILDING NO. 36, CA. 1916

The largest building at Fort Yellowstone, this stone structure was built in 1909 to house two companies of troops.

Yellowstone National Park Archives

PLATE 90. BUILDING NO. 36, 1969

Having recently been extensively remodeled on the interior, it now houses the park administrative offices.

Photo by Charles S. Pope





PLATE 91. BUILDING NO. 37, CA. 1916

This small stone building housed the blacksmith and saddle shops for the two new stables, buildings 34 and 38.

Yellowstone National Park Archives

PLATE 92. BUILDING NO. 37, 1970

Aside from the substitution of an overhead garage door on the north side for the original sliding one seen above, the appearance remains unchanged. It still houses shops.

Photo by David G. Battle


BERRY'S PHOTO



PLATE 93. BUILDING NO. 38, CA. 1916

Although oriented differently, it is the twin of building 34, and was also constructed in 1909.

Yellowstone National Park Archives

PLATE 94. BUILDING NO. 38, 1969

The door on the left has been enlarged, and the building has received other minor fenestration changes. The tile roof has also been removed and replaced with wooden shingles.

Photo by Charles S. Pope





PLATE 95. BUILDING NO. 39 (date unknown)

This building was built to house the U.S. Engineer's office. Nicknamed "the pagoda" its tapered walls and finely detailed stonework made this one of the most distinctive buildings at Fort Yellowstone. It was designed by the architectural firm of Reed and Stem of St. Paul, Minn. at the insistence of Captain Chittenden.

Yellowstone National Park Archives

PLATE 96. BUILDING NO. 39, 1970

Little changed in outward appearnce, it now houses the North District Ranger Station.




RANGER OFFICE

PLATE 97. BUILDING NO. 39, INTERIOR, 197-

The handsome woodwork shown here is in what was originally the drafting room. Only this room and the adjacent office remain relatively intact.

Photo by David G. Battle

PLATE 98. BUILDING NO. 39, INTERIOR, 1970

Much of the interior has been considerably altered, but it is hoped that evidence of original conditions may be found benenath the acoustic tile and other added materials.

Photo by David G. Battle





PLATE 99. BUILDING NO. 40 (date unknown)

One of the buildings belonging to the U.S. Engineer Department, this residence may have been built in 1903 by Captain Chittenden to house himself and his family.

Yellowstone National Park Archives

PLATE 100. BUILDING NO. 40, 1971

Considerably less attractive as the result of past alterations, the basic form still remains.

Photo by David G. Battle





PLATE 101. BUILDING NO. 49 (date unknown)

Constructed in 1894 to house the U.S. Commissioner, his offices, and a jail, it was the first stone building at Fort Yellowstone.

Yellowstone National Park Archives

PLATE 102. BUILDING NO. 49, 1971

Hardly touched by time, it appearance remains almost unchanged.

Photo by David G. Battle





PLATE 103. BUILDING NO. 56, CA. 1916

This concrete structure is the second powerhouse, built in 1910. Its greatly increased capacity provided electrical service to the area for many years.

Yellowstone National Park Archives

PLATE 104. BUILDING NO. 56, 1970

Although much of the equipment has been modernized, only superficial changes have occurred on the exterior. It is now used as a standby power source.

Photo by David G. Battle





PLATE 105. FLAGSTAFF, CA. 1916

This stepped flagstaff was erected on the parade ground in front of the administration building, and was a prominent fixture for many years. See plates 4 and 5.

Yellowstone National Park Archives

PLATE 106. FLAGSTAFF, 1971

Prominently located on the street divider between buildings 1 and 39, the existing flagstaff is the top section of the one shown above.

Photo by David G. Battle





PLATE 107. BUILDING 2032, 1971

This log structure was built about 1895 to provide overnight accomodations for the mail carrier serving Fort Yellowstone from Livingston, Montana. It has been extensively altered and is badly deteriorated and bears little relationship to architecture of the fort itself.

Photo by David G. Battle

PLATE 108. BUILDING 2051, 1971

Although a relatively recent structure and one not in itself associated with Fort Yellowstone, it was the studio of Jack Ellis Haynes, a noted photographer having a lifelong association with Yellowstone Park He spent his childhood at Fort Yellowstone, his father being F. Jay Haynes, also a photographer, whose studio is shown on plate 7 and to whom many of the historical photographs contained in this report must probably be attributed.

Photo by David G. Battle





PLATE 109. GARDINER ENTRANCE ARCH (ROOSEVELT ARCH), 1930

President Theodore Roosevelt laid the cornerstone for this monumental entrance arch at Gardiner, Montana on April 24, 1903.

Yellowstone National Park Archives

PLATE 110. GARDINER ENTRANCE ARCH, 1969

Once the primary entrance to Yellowstone Park when the visitors came mostly by train, it is now often bypassed and somewhat neglected. The wing wall nearest the viewer in plate 109 was removed by the National Park Service in 1930, and the pedestrian portals are now boarded up, but otherwise the appearance of the structure itself is little changed.

Photo by Charles S. Pope





PLATE 111. FIREHOLE RIVER BRIDGE, 1931

The Army originally erected this building about 1916 over the Gibbon River on the Madison-Norris road. This photograph was taken just after the National Park Service reinstalled it in its present location over the Firehole River on the Fountain Freight Road.

Yellowstone National Park Archives

PLATE 112. FIREHOLE RIVER BRIDGE, 1970

Although its appearance is little changed, it has deteriorated and is in need of extensive rehabilitation.

Photo by A. Lewis Koue





1. CAMP SHERIDAN, 1889

National Archives, Cartographic
Division, Record Group 393

CAMP SHERIDAN

Wyoming.

1889.





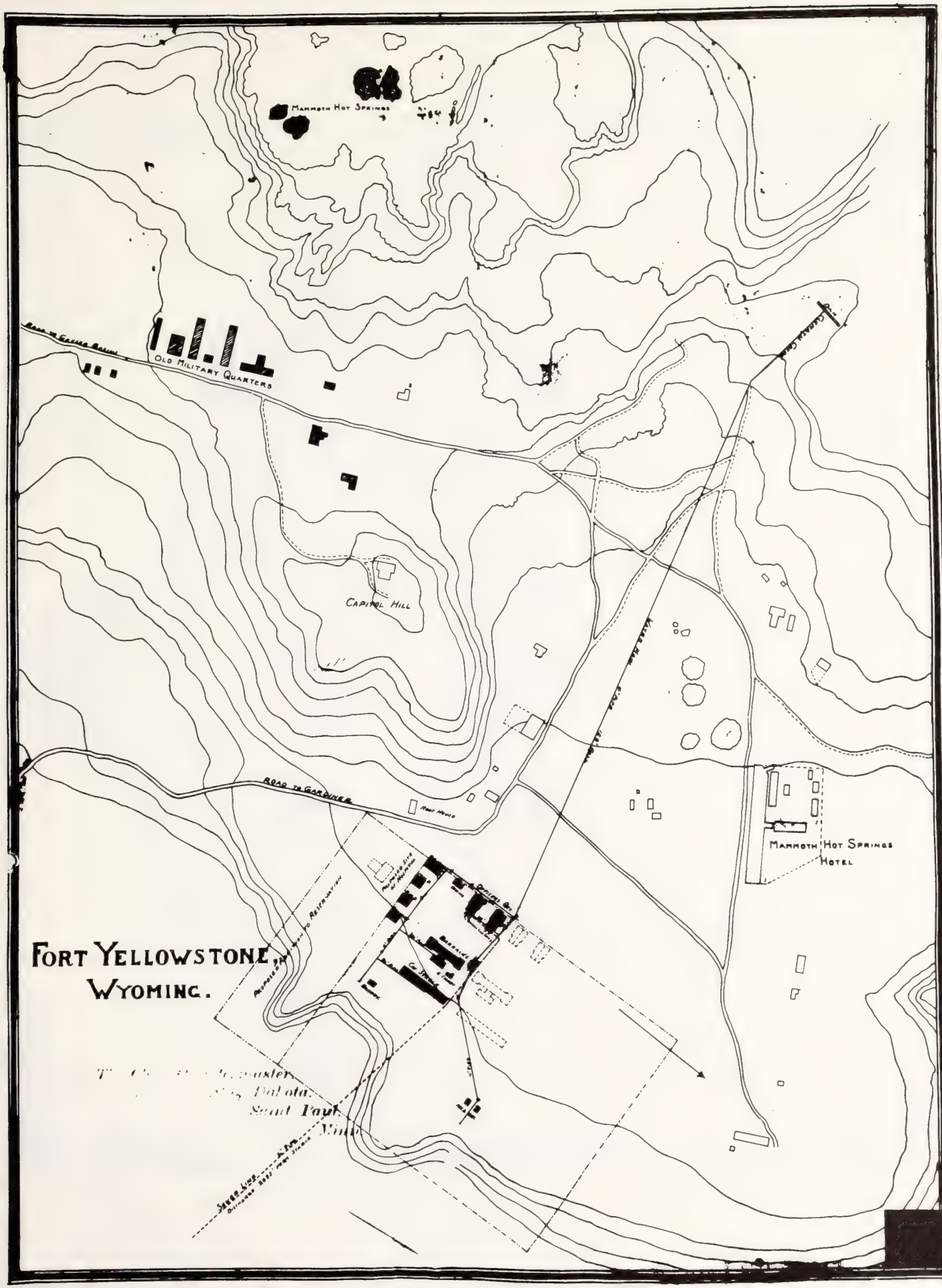
TEMPORARY POST ESTABLISHED 1886

18

2. FORT YELLOWSTONE, BETWEEN 1891 AND 1897

Existing structures are shown in black; proposed structures are shown in dotted lines.

National Archives, Cartographic Division, Record Group 393


Mammoth Hot Springs
Old Military Quarters
Capitol Hill
Road to Gardiner R.
Mammoth Hot Springs Hotel
Fort Yellowstone, Wyoming.

3. FORT YELLOWSTONE, 1901, BY HIRAM M. CHITTENDEN

Map was drawn before the road alignments and landscaping of 1902.

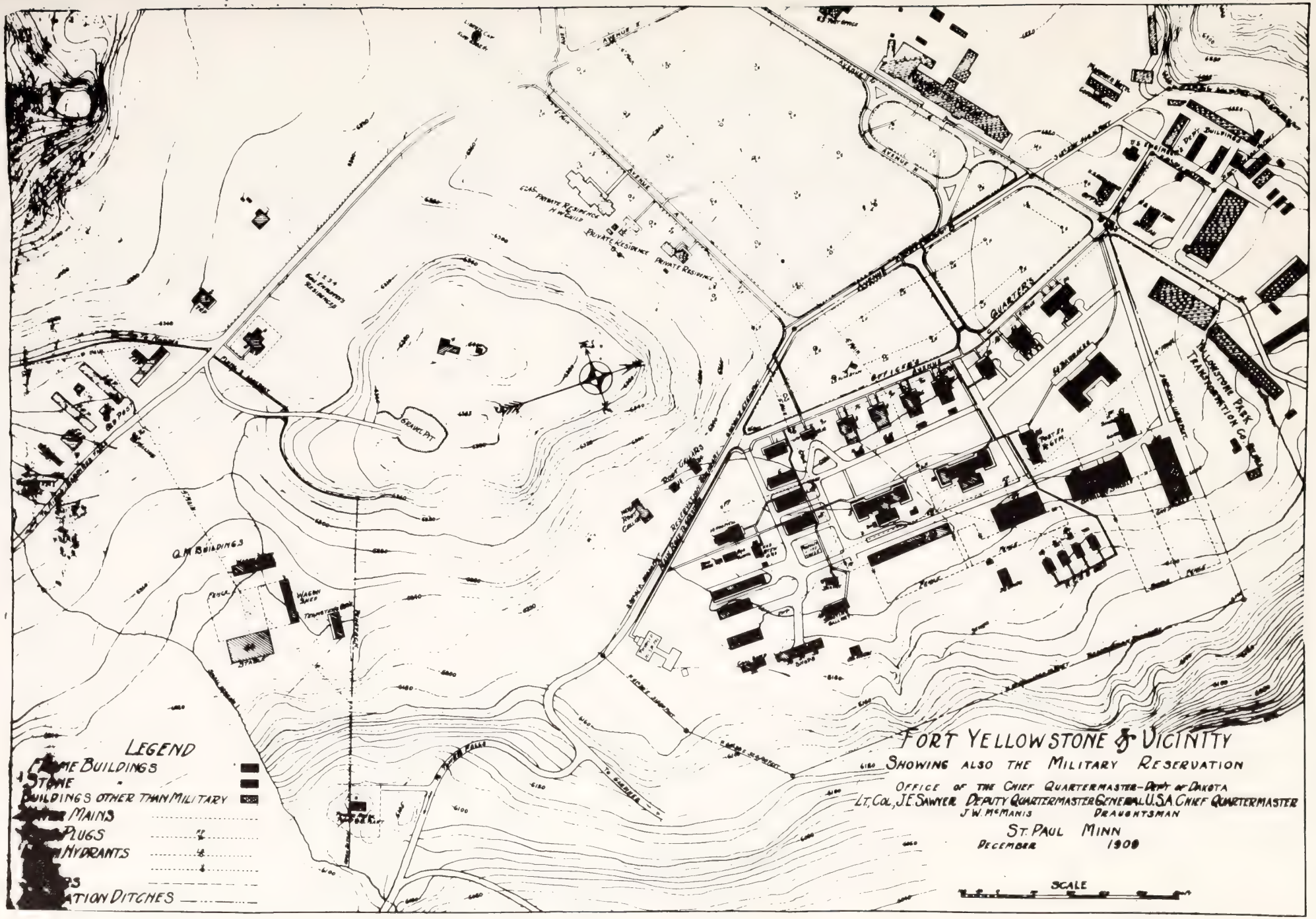
Yellowstone National Park Archives

MAMMOTH HOT SPRINGS, WYO.
CAPT. H.M. CHITTENDEN

4. FORT YELLOWSTONE, 1909

The proposed hospital and guard house were built later, also a stone chapel was added.

National Archives, Cartographic Division, Record Group 393


LEGEND
STONE BUILDINGS
STONE BUILDINGS OTHER THAN MILITARY
MAINS
PLUGS
HYDRANTS
ATION DITCHES
FORT YELLOWSTONE & VICINITY
SHOWING ALSO THE MILITARY RESERVATION
OFFICE OF THE CHIEF QUARTERMASTER-DEPT OF DAKOTA
LT. COL. J.E. SAWYER DEPUTY QUARTERMASTER GENERAL U.S.A. CHIEF QUARTERMASTER
J.W. McMANIS DRAUGHTSMAN
ST. PAUL MINN
DECEMBER 1908
SCALE
GRANT PT.
Q.M. BUILDINGS
QUARTER'S
YELLOWSTONE PARK TRANSPORTATION CO.
TO CANYON

5. MAMMOTH AREA, 1972

The map shows those Fort Yellowstone structures still in existence.

Denver Service Center



LEGEND

STRUCTURES

- EXISTING TO REMAIN
- EXISTING TO BE REMOVED
- FORT YELLOWSTONE BOUNDARIES
- HISTORIC DISTRICT BOUNDARIES
- HISTORIC STRUCTURES
- HISTORY-RELATED STRUCTURES
- HISTORIC STRUCTURES TO BE RECONSTRUCTED
- 1 N P S BUILDING INVENTORY NO

SCALE

0 100 200 400 600 800 1000 FEET

NORTH

BASIC DATA

1909 MAP OF FORT YELLOWSTONE MILITARY RESERVATION
U S ARMY CORPS OF ENGINEERS

1911 MAP OF FORT YELLOWSTONE WYOMING AND VICINITY
OFFICE OF CONSTRUCTING QUARTERMASTER FT YELLOWSTONE

AUBREY L HAINES HISTORIAN
FORT YELLOWSTONE IDYL

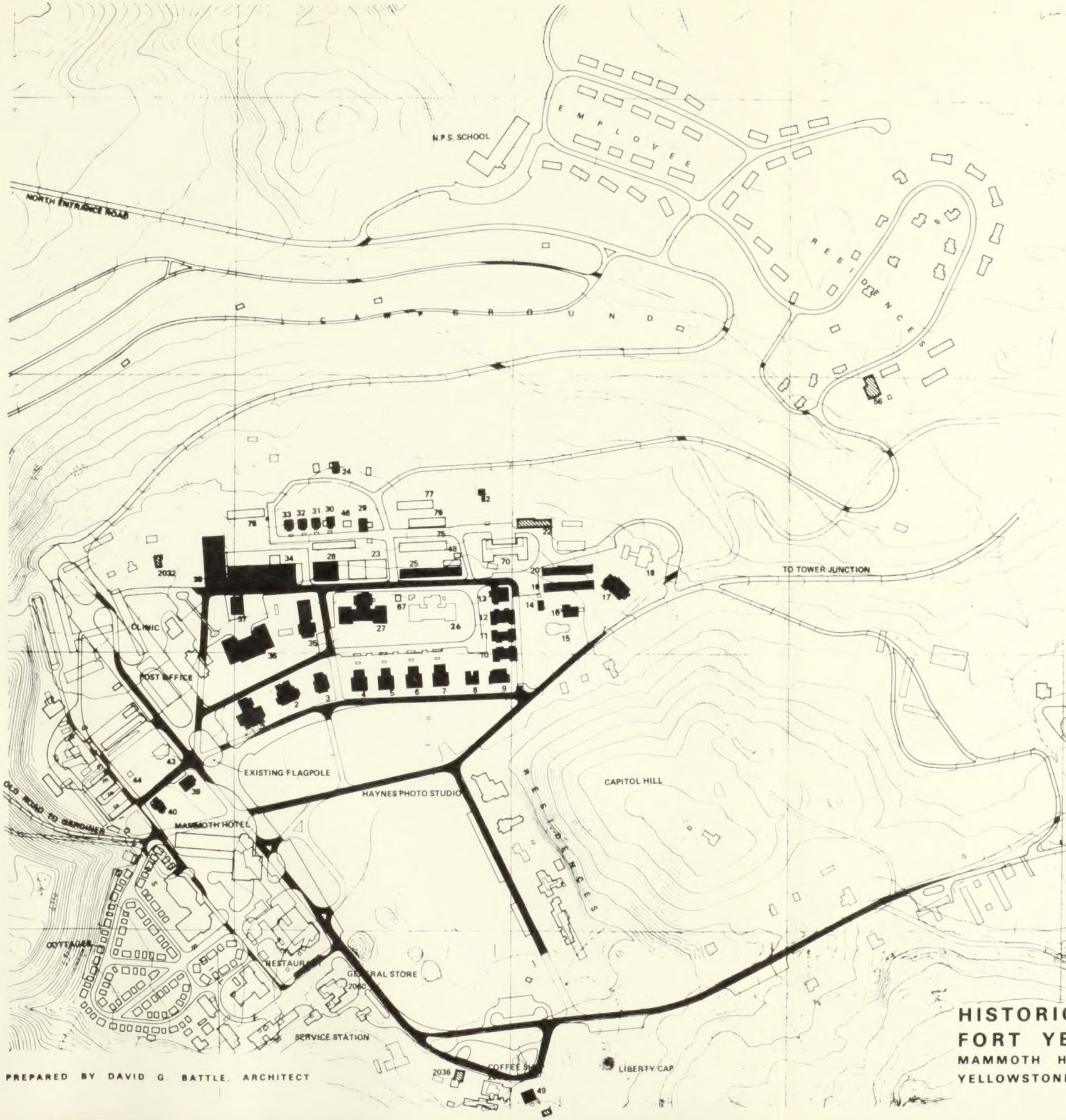
NP YEL 8 642 B

NP YEL 41 028 SHEETS 2 & 3

NP YEL 2 262 D SHEET 1

PREPARED BY DAVID G BATTLE ARCHITECT

PROPOSED
HISTORIC STRUCTURES PRESERVATION PLAN
FORT YELLOWSTONE MILITARY RESERVATION
MAMMOTH HEADQUARTERS AREA
YELLOWSTONE NATIONAL PARK



LEGEND

N.P.S. AND CONCESSION BUILDINGS

EXISTING

FORT YELLOWSTONE BUILDINGS

CLASSIFIED HISTORIC STRUCTURES

NON-CLASSIFIED HISTORIC STRUCTURES

HISTORIC STRUCTURES NO LONGER EXISTING

ORIGINAL FORT YELLOWSTONE ROADS STILL IN USE

1 N.P.S. BUILDING INVENTORY NO.

SCALE:

0 100 200 400 600 800 1000 FEET

BASIC DATA:

1909 MAP OF FORT YELLOWSTONE MILITARY RESERVATION
U. S. ARMY CORPS OF ENGINEERS

1911 MAP OF FORT YELLOWSTONE WYOMING AND VICINITY
OFFICE OF CONSTRUCTING QUARTERMASTER, FT. YELLOWSTONE

AUBREY L. HAINES, HISTORIAN
"FORT YELLOWSTONE IDYL"

NP-YEL/8,642-B

NP-YEL/41,028, SHEETS 2 & 3

HISTORIC STRUCTURES BASE MAP
FORT YELLOWSTONE MILITARY RESERVATION

MAMMOTH HEADQUARTERS AREA
YELLOWSTONE NATIONAL PARK

101	41040
10/70	HHA-WSC

PREPARED BY DAVID G. BATTLE, ARCHITECT

6. PROPOSED FORT YELLOWSTONE PRESERVATION PLAN

The map shows the possible development of the Mammoth area to more nearly recreate its historic appearance without precluding its continued use as park headquarters.

Denver Service Center